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A JOURNAL OF

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(MARCH—JULY, 1889.)

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The Archaeological Review.

VOL. III.] MARCH, 1889. [NO. 1.

RECENT RESEARCH IN BIBLICAL ARCHÆOLOGY.[1]

Orientalische Bibliographie, herausgegeben von A. Müller, 1887-8.
Liber Chronicorum, edidit S. Baer, prefatus est F. Delitzsch, 1889.
Names and Places in the Old Testament (Pal. Expl. Fund), 1888.
Genesis mit Unterscheidung der Quellen, von E. Kautzsch und A. Socin, 1888.
Geschichte der Hebräer, von R. Kittel, I, halbband, 1888.
Histoire du Peuple d'Israel, par Ernest Renan, tomes i, ii, 1887-9.
Alttestamentliche Theologie, von H. Schultz. Vierte Auflage, 1889.

I SUPPOSE I have been asked to lead off[2] the series of articles on recent archæological research which are to form a prominent feature in the second year's issue of the *Archæological Review*, because the subject of which I am to treat affords an admirable example of the need of application of the methods of research which this *Review* was established to promote. To the antiquary of the older school, "the man of bones and stones," as he has been irreverently styled, the Old Testament offers practically nothing on which to exercise his industry and ingenuity. The boundary stone of Gezer, discovered by M. Clermont Ganneau; the Siloam inscription; a seal of one Haggai, of doubtful age; a jar, which is probably Phœnician, and the remnants of the Ophel Wall "that lieth out" (Neh. iii, 26)—this is the scanty yet complete list[3] of the remains of Hebrew antiquity. There is obviously no field here for the "bones and stones man".[4] The Hebrew past is included

[1] In this paper the term "Biblical Archæology" is confined to the Old Testament.

[2] Mr. Alfred Nutt has already given an excellent model in his review of research on "Celtic Myth and Saga", *Arch. Rev.*, ii, pp. 110-42.

[3] Taken from Major Conder's *Syrian Stone Lore*, cc. iii and iv.

[4] An incisive instance of this is the fact that the Society of Biblical Archæology, while doing excellent work in Assyriology and Egyptology, never by any chance has anything to say about Biblical Archæology.

between the covers of a single Book, and the study of it must be based on that book. The study of Hebrew antiquities is rightly named Biblical Archæology.

At first sight there seems no reason to complain of any want of activity in this field of research. So numerous have become the essays, the treatises, the reviews, and even the special journals devoted to the subject, that it would be impossible for any one person to follow all that is being done in the subject, or even in any branch of it, without some organisation by which these multifarious researches should be duly noted. Bibliography, which in these days has grown to be the *scientia conservatrix omnium scientiarum*, has at last come to the aid of Biblical Archæology. Many tentative attempts have been made to supply the Biblical student with an orderly record of the work that is being done in his subject. For two or three years the German Oriental Society, familiar to the Orientalist as the D.M.G., gave a *Jahresbericht* of the progress of all departments of Oriental research, and included an admirable summary of Old Testament research from the pen of Prof. Siegfried. But the *Jahresberichte* became more and more "verspätet" in publication, and ceased after, I think, three issues.[1] This fault is avoided by the excellent *Theologische Jahresbericht*, which now always appears in the year following the literature reviewed. Celerity of reference is also afforded by the book-lists of the *Zeitschrift für alttestamentlichen Wissenschaft*, edited by Prof. Stade; and at the beginning of each year Prof. Zöckler reviews the Old Testament literature of the past year in the *Zeitschrift für Kirchenwissenchaft*, and Prof. Cheyne usually appraises recent work in *The Expositor* with his unique combination of scholarship and literary insight. But, for the student's purposes, all these reviews have been superseded by the quarterly issues of the *Orientalische Bibliographie*, especially since the accession of Dr. Gottheil to the staff has caused the English and American notices to come up to the level of the rest of the work. Here we have recorded, within three, or at most six months of its appearance, every book, article, or even review that has appeared on the Old Testament. It is true that there is no indication given of their relative value, and too little of their contents, but one soon acquires the bibliographer's instinct, and recognises the names from which good work may be anticipated; while the amount and character of the reviews which a book or article receives serve as a measure of its

[1] The Historical Society of Berlin also issues a *Jahresbericht*, including a section devoted to O. T. history, but the last issue deals only with 1884.

importance. Yes, Biblical Bibliography[1] is organised, and we can now know definitely where we are in any branch of the subject.

I have thought it would be of some interest to estimate the amount of literature chronicled by the *Orientalische Bibliographie.* Taking the last two numbers accessible to me (those that appeared in July and October of last year, I give the numbers of articles, etc. under each notice:

	Bnd. ii, hft. i.	Bnd. ii, hft. ii.
Palestine . . .	Nos. 996-1026, 31	Nos. 2427-2449, 23
Hebrew Language .	1027-1038, 12	2450-2457, 8
Old Testament .		
General . . .	1039-1089, 51	2458-2490, 43
Special Books .	1090-1152, 63	2491-2543, 53
Reviews of preceding	53	 64
Total number	210	 191

Or an average of two hundred books, articles, and reviews per quarter, or eight hundred a year, nearly two-and-a-half a day, not to speak of the articles, etc., on Phœnician, Assyriology, Hittites, Egyptology, and so on, that bear more or less directly on the subject.

And yet with all this activity I have no hesitation in saying that there is scarcely a subject in the whole range of scholarship that is in so backward a condition as Biblical research, considering the attention it has attracted for so many years. I have spoken above of the fact that Hebrew antiquity is included within the covers of one book, but as a matter of fact that book includes thirty-six works,[2] ranging in point of date over close upon a thousand years. Yet there is very little attempt as yet to specialise on periods or on subjects. A Biblical scholar is supposed to be equally *au fait* with the problem of the Pentateuch, with the apocalypse of Daniel, with the book of Kings, and with Job. It is as if one should expect good work on the Sophoclean drama from an editor of the *Republic,* or look for instruction on

[1] It is just to add that the *Orientalische Bibliographie* does the same work for post-Biblical Judaism, for Egyptology, Assyriology, and for all the Oriental languages and literatures. On the other hand, it has been a little too complete in including *King Solomon's Mines* in its list.

[2] Thirty-eight, counting Isaiah II and Zechariah II separately. Psalms and Proverbs could be divided up into separate collections. Burke put the case well when he spoke of the Bible as "a most venerable but most multifarious collection of the records of the divine economy carried through different books, by different authors, at different ages, for different ends and purposes." (Speech on the Acts of Uniformity, quoted by Dean Bradley, *Job*, Pref., p. x.)

Ovid from an authority on Gaius. The qualifications required for one of these subjects are quite different from those required for another.

As a consequence of this habit of regarding the Old Testament as one book instead of forty, we are at present at a standstill for special "indices verborum" of the separate books. If one wants to know if Ezekiel uses a certain word, one has to go to a concordance of the whole Bible, and Fürst's, the best, is by no means satisfactory; while if one wants to get a general impression of the prophet's vocabulary and style, one can only work it out by oneself.[1] Then the lexicography of Hebrew is still best represented by Gesenius' *Thesaurus*, planned more than half a century ago. Fancy a Greek scholar content with the first edition of Passow, or a Latin one with Facciolati. And for proper names the onomastica of last century, with their always faulty and often ludicrous etymologies, are our only aids in this important subject.

But it is in the state of the text that the backward state of Old Testament scholarship is most conspicuous. It is in a worse condition than that of the New Testament before Griesbach. It is only within the last ten years that the materials for determining one aspect of the text has been given in Dr. Ginsburg's edition of the *Massora*. Baer has also within the last twenty years brought out editions of separate books which give us an adequate idea of the Massoretic redaction of the text, for redaction it is, as Geiger was the first to point out in his *Urschrift*. When we do get the Massoretic text in a final form,[2] we shall still be far off from a text that can form a sure foundation for research into the Hebrew past, though the Massoretic text will always represent the Bible as it has influenced the world. But there is yet to be desired the text that underlies the Septuagint, and before that can be done the text of the Septuagint itself has to be settled. According to Lagarde, there are two main versions of this, and he has only given us as yet half of one of them.[3] The time seems far off before we can

[1] Notwithstanding all the literary activity of the past fifty years on the Pentateuch problem, there is no such thing as an "index verborum" of the Jahvist, Elohist, &c. For the matter of that, there is no edition of them in Hebrew.

[2] I have heard it stated that Baer, the greatest living Massorite, and probably the greatest Massorite that has ever lived, was unable to get a publisher for a contemplated edition of the *Massora*. Such a thing could scarcely happen in classical scholarship.

[3] He seems at present to be dissipating his energies on editing Giordano Bruno and writing Antisemitic *brochures*. But we need not despair: Lagarde is a very Briareus of scholarship.

hope to approach anything resembling the *Ur*-text of the Old Testament.

And yet without this approach to the *Ur*-text, how can we hope to be on firm ground in Biblical Archæology? How often have we not seen a whole scaffolding of theory come down headlong when one prop based on a faulty reading has been perforce removed? Just at present, Biblical Archæology is as Classical Archæology was in the days of the Scaligers and Casaubon, before Bentley had given the impulse to the purification of the classical texts. Many books, *e.g.*, Job, are in as bad a state as the *Eumenides*, and though something has been done sporadically, as by Lagarde on Proverbs, Wellhausen on Samuel, Graetz[1] and Bruston on the Psalms, Cornill on Ezekiel, there is no adequate recognition of this primary need. It is characteristic that the only collection of the most plausible emendations is that contained in *English* in the Queen's Printers' Bible. Just at present the emendations that are offered are generally arrived at in the interests of a "tendency". The author or opponent of a theory finds some passage which does not agree with his views; he looks up the LXX on the point, and finds the passage is corrupt. What we want is textual criticism, which shall be conducted on definite and general principles based on the largest possible induction of the facts, and entirely indifferent whether its results tell for Dillmann or for Wellhausen.

The need for a sound text as the basis of Biblical Archæology has to be emphasized, because it is the mark of modern research into the past, when this rests on documents, to lay stress on the need of pure texts. Another need that requires just as much emphasis is that of a defined system of chronology. Of course it is too much to ask this for the so-called "mythical" period, but from Samuel onwards we ought to have trustworthy dates. Yet, as a matter of fact, we cannot say for certain within twenty years when any event happened in Judah or Israel before the fall of Samaria. While this uncertainty lasts, what history of Israel can we have worthy of the name? What should we say of a history of the British constitution in which it was uncertain whether Charles I died in 1620 or 1660? As we want a Bentley for the text, so we need a Scaliger for the chronology.

[1] I am inclined to think that Jews, to whom Hebrew is still in some sort a living language, into which they are born, may be expected to do most for this need of Biblical science, while for other purposes their very nearness to the Bible is a disadvantage. In this branch they are likely to be more fertile in suggestion than others, as indeed is proved by the remarkable extent of Prof. Graetz's emendatory suggestions.

Hitherto we have been dealing with what has *not* been done in recent research in Biblical Archæology. The lexicographical helps, the state of the text, the system of chronology, are all in a state of confusion, and yet they are the foundation of any adequate treatment of Hebrew as of any antiquities. Let us now turn to branches of the subject where Biblical science does not present so unsatisfactory an aspect. In the statistics of Old Testament literature given above, the proportion devoted to purely geographical items is very large, something like one-eighth of the whole literature being devoted to this subject. This is characteristic of our own times and of the present state of Biblical research. The amount of scholarship which is nowadays being devoted to geography, especially historical geography, is remarkable. Running through the table of contributors to the *Encyclopædia Britannica* for examples, one sees almost the very first names in contemporary scholarship devoted to the geographical articles. And with reason: places and towns are, as it were, huge documents that preserve their identity through the centuries more completely than any others. Round them can be grouped all the knowledge of the past that we possess, and the light thrown is mutual. In Biblical research the localities of the Holy Land are practically the only records remaining of the Bible events, the sole *pièces justificatives*, if we may so term them. Hence the great activity that has been displayed for many years past in investigating all that appertains to the soil of the Holy Land. In that work the Palestine Exploration Fund has taken a foremost part, and though its work cannot yet be said to be ended, it is nevertheless true that it has already done most of what it set out to do some twenty-three years ago. This may be divided into two great divisions: the Map, or rather Ordnance Survey, of the Holy Land, with the Memoirs that illustrate it, and the identification of Biblical sites. The former is scarcely recent enough to be considered here, though the almost universal praise of geographical experts is sufficient to indicate that for Western Palestine that work has been done once for all. What greater praise can any work have? Somewhat different is the case with the work of identification, of which a useful summary was issued by the Palestine Exploration Fund last year. This enables us to judge of the direct elucidation of Scripture geography, for which we are indebted to the Fund. The results are somewhat meagre. The list of names and places includes some 1500 in the Old Testament and Apocrypha. Those which are claimed in the list as having been identified by those connected with the

Fund, with more or less probability, amount only to 144, if I have calculated aright. But of these the very large number of 97 are queried even by the suggestors, leaving only a nett accession of knowledge amounting to 47 sites identified. Of course, the cream of the work of identification had been removed by the admirable and thorough work of Robinson,[1] and of what he left unidentified the majority of the names are not provided with any sure marks in the Bible narratives. Still it must be confessed that the work of the Fund in this line of research is somewhat disappointing, especially as so much must have been hoped from it in this direction by its most enthusiastic supporters, the searchers after "confirmations" of Holy Writ. The Committee, however, have always denied any responsibility for this side of the work of their officials, who have been geographers first and have become Biblical scholars in the course of their geographical research. Meanwhile, the interest of what has already been done in the way of identification lies as much as possible in the remarkable identity of so many of the modern and ancient names. Many of the villages mentioned but once in Joshua still exist, after all changes under Persian, Greek, Roman, and Arabic conquerors, with practically the same names, allowing for slight phonetic detrition. This fact gives great hopes for the most recent departure of the Palestine Exploration Fund—the issue of anthropological and folk-lore notes and queries about the various sections that make up Palestine society. The significance of this will be again referred to; but it was right to connect it with the remarkable fact of the persistence of place-names in Palestine for nearly 3000 years.

Some assistance in Palestine geography has of recent years been given by the cognate studies of Egyptological and Assyriological topography,[2] and more may be expected in the near future, especially as to the geographical horizon of the Hebrews at different stages of their contact with the greater monarchies surrounding them. Not much, however, has been done here since Delitzsch and Lenormant, the former in his *Wo lag das Paradies?* the latter in his *Origines*, which remains, like too much of his work, a colossal fragment. Of the more direct elucidation of Hebrew antiquities from the Assyrian records, Schrader's well-known "KAT", recently Englished by Rev. O. C. Whitehouse, still represents the high-water

[1] After all, considering its expenditure of over £70,000, the total work of the Fund does not contrast so favourably with that of private investigators like Robinson and Guérin.

[2] I use this term for want of a better. What name are we to give to the growing study of place-names and their identifications?

mark of Assyriological research. It is from this quarter alone that we may expect a solution of the pressing difficulties of Biblical chronology to which I have referred above. Of other more sporadic contributions to Biblical Archæology from Egyptological and Assyriological research, the readers of this *Review* are to have an account from other hands.[1] But I would like to refer to two recent memoirs in the *Journal of the Anthropological Institute*, which develope lines of research which, if not entirely novel, have reached stages of development that constitute a new departure. These are papers by Prof. R. Stuart-Poole (*Journ. Anth. Inst.*, May 1887) and Mr. G. Bertin (*ib.*, Nov. 1888), on the race-types found on the Egyptian and the Assyrian monuments respectively. The latter especially has direct bearing on the racial *provenance* of the Israelites. Mr. Bertin's results are expressed with a somewhat naïve dogmatism which is obviously not ju tified by the materials at hand for his most startling suggestion that the most characteristic racial marks of the Hebrews come from the Nairi, or inhabitants of Armenia. But his paper shows that the materials at our disposal are soon likely to lead to definite results as to the race-types of Assyria and Syria.[2]

After all is said and written, little can be learnt of the archaic life of the Hebrews outside the pages of the Book that causes that life to be of exceptional interest to us. Hence the literary criticism of the Bible must always form the propædentic to Biblical Archæology. Hence the enormous amount of critical analysis that has been devoted during this century to the so-called problem of the Pentateuch. No book, except perhaps Homer, has been submitted to so much "slicing", to use a term of Mr. Gladstone's, as has the Pentateuch at the hands of German and Dutch scholars. And the results have not been discordant so far as the mere division of the literary strata is concerned. De Wette, Ewald, Hupfeld, Kuenen, and Wellhausen have each added his quota to the settlement of the question of attribution.[3] Every verse, even every half-verse in the Pentateuch and Joshua, known conjointly as

[1] Articles on recent research in these subjects are to be included, I believe, in early numbers of the *Archæological Review*.

[2] Here, again, is a point on which the new departure of the Palestine Exploration Fund may throw light. Collections of race-types of the present inhabitants of Canaan may show the same kind of continuity as has been observed in Egypt (*see* Tylor, *Anthropology*, p. 79).

[3] I am referring here solely to the determination of the various *Quellen*, and the parts belonging to them. For their relative ages we should have to add such names as Vater, Reuss, Graf, and Dillmann.

the Hexateuch, is now referred to one of five sources. It is indeed remarkable what unanimity now prevails as to the attribution of every section of the Hexateuch. To a dispassionate observer, the criteria employed do not seem sufficiently trenchant to justify such confidence. The distinction of the Divine names "Elohim" and "Jahveh", which formed the starting-point of the whole investigation, only or mainly applies to Genesis, and in that book only applies generally and with exceptions. The linguistic tests applied to distinguish the different sources are rendered uncertain by the very small extent of Hebrew literature that remains extant. And the whole method of analysis is made insecure by the possibility that the divergences in the narratives, both in matter and form, may be due not to differences in written accounts, but to divergences in oral tradition. Much of the narrative portion is still attributed to "JE", in which the Jahvist and Elohist sources seem inextricably mixed. It does not seem to have occurred to any investigator that these passages might have been written down by a narrator who was familiar with, or who had collected different accounts of the same stories. The additions of the "Redactor", to which such frequent and such suspicious resort is made by the literary analysers, would then be natural additions of the first hand that put the stories on parchment. If the brothers Grimm, instead of giving the variants of their *Mährchen* separately, had chosen to combine them into one version, I fancy that something similar would have occurred.[1] This hypothesis allows for divergences of tradition as much as the prevalent one; but it accounts for their appearance in the written narrative much more plausibly, as it seems to me, than the current views which make the various "redactors" suspiciously similar to a modern sub-editor with his shears and paste. Curiously enough, none of these investigators have taken the trouble to inquire how literary redactors do proceed when they have divergent written narratives before them, though the mediæval chroniclers afford over-abundance of examples. To take an instance near at hand, the relations of Roger of Howden to Benedict of Peterborough, or of Matthew Paris to Roger of Wendover, afford instances of what I mean, where the later "redactor" takes over the previous writer's work *en bloc*, adding to it, but not "slicing" it about in the manner assumed by the German

[1] It might be worth trying to read out, with an interval between them, a couple of variants of a Greek myth to a set of intelligent schoolboys (using perhaps "Zeus" in one case and "Jupiter" in the other), and getting them to reproduce the story from memory a short time afterwards.

and Dutch critics. A minute study of Holinshed and his sources would probably throw as much light on the problem here raised as anything I can think of. At the same time it must be owned that the literary critics have in several places, as in the story or stories of Creation, and in that of Joseph, produced evidence which seems to indicate the existence of literary material in the hands of the redactors. And certainly their work is conclusive as to the existence of divergent tradition, whether preserved orally or in writing. The only difference which would be made by regarding the sources as oral would be to make their origin more indefinite in point of time than they are regarded at present.

Be all this as it may, literary criticism proceeding on the assumption of Redaction of literary, and neglecting the possibility of the Amalgamation of oral, tradition, has now done its minutest. On the whole, it is remarkable what unanimity has been arrived at by the analysers. There is scarcely a verse in the whole Hexateuch that is not referred to one of the following five sources :—

(1) The Jahvist, whose work is distinguished by the use of the name "Jahveh" (Wellhausen and Kuenen's J, Dillmann's B).

(2) The Elohist, using the name "Elohim" (Wellhausen's E Dillmann's C).

(3) The Deuteronomist, who compiled Deuteronomy and "redacted" (1) and (2) (Wellhausen D, Dillmann D).

(4) The Priestly Narrative, beginning with Gen. i-ii, 3 (Wellhausen Q, Kuenen P_2, Dillman A).

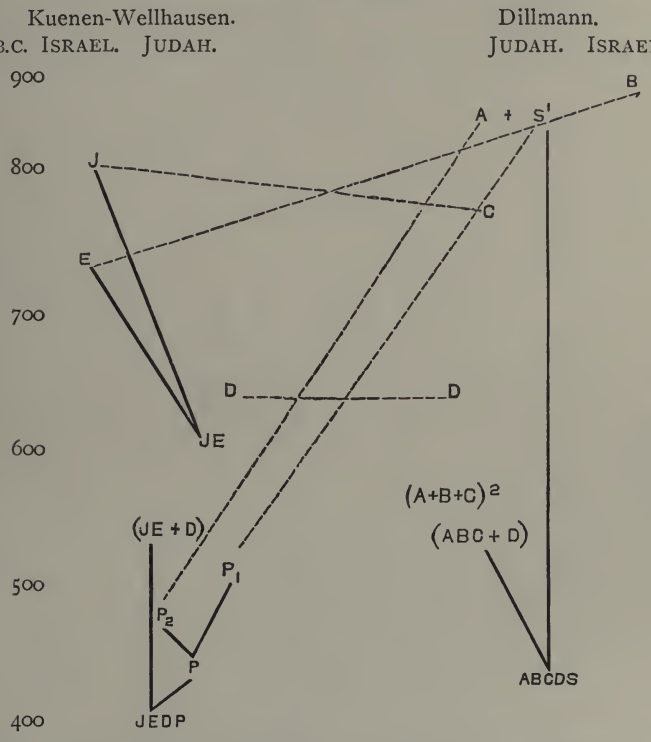
(5) The Priestly Laws, containing the legislative sections of the middle books (Wellhausen PC, Kuenen P_1, Dillmann S).[1]

Besides these, there are various Redactors and different stages of the various sources J_1, J_2, J_3, etc., Q_1, Q_2, Q_3, etc., to enable the analysts to overcome difficulties raised by their own methods. Apart from minor disagreements, the chief representatives of the critical school—Wellhausen and Kuenen on the one side, Dillmann on the other—are at one as to the sorting out of the whole contents of the Hexateuch into these five pigeon-holes. Where they differ —and the divergence here is fundamental—is as to the dating of the various sources regarded as literary compositions. The chief sources in dispute are the two last, the Priestly Narratives and Laws, about which there is a difference of no less than four centuries,

[1] Profs. Kautsch and Socin have just edited Genesis so as to bring out the differences of sources by different types, of which they use no less than eight. For an example of minute division of the text, see Gen. xxxiii, 17-20.

Wellhausen and Kuenen placing them after the Exil, Dillmann in the ninth century B.C. There is also some difference as to the localisation of those sources which are admitted to be early by both sides. I have thought it would be interesting to exhibit in a graphic form the views of the two schools which now divide Biblical criticism as to the dates of the sources of the Pentateuch. The latest utterances in complete form[1a] are contained in the second edition of Kuenen's *Onderzoek* (excellently Englished by Rev. P. H. Wicksteed), and in the concluding essay of Dillmann's commentary on Numbers, Deuteronomy, and Joshua, in the *Kurzgefasstes exegetisches Handbuch* (which is not likely ever to see the light in English, though by far the most important aid to the understanding of the Old Testament). From these I compile the following Table :—

Composition of the Hexateuch.



[1] Dillman is not very precise in his determination of the date of the Priestly Legislation.
[2] Brackets, dark lines, or multiple letters, represent stages of redaction of two or more sources into one. The dotted lines connect the same five sources differently dated by the two schools.

[1a] We have not yet got any complete reply from Kuenen or Wellhausen to Dillmann's weighty statement of his case in the third volume of his Commentary on the Pentateuch.

The main points of argument are as to the date of Deuteronomy, the Israelite origin of the Jahvist, and the late date of the final redaction. The steep gradients of the dotted lines indicate the wide divergence between the two schools as to the date of the Priestly portions of the Pentateuch. It is difficult to state the present tendency of opinion on this important point. Herr Kittell and M. Renan, in their recent histories of Israel, mentioned at the head of this article, incline to Dillmann's side. Stade, in his history, is equally emphatic as a *Wellhausenianer*. It is safe to say, perhaps, that the triumphant progress of the Kuenen-Wellhausen school is at present barred by Dillmann's Pentateuch commentary, one of the finest pieces of purely literary analysis that even Germany has produced.

Meanwhile, it deserves being pointed out in these pages that the only criteria relied upon in these struggles are purely literary, and therefore in large measure subjective. The main question at issue is connected at every point with the archæology of institutions: the Priestly Legislation whose date is to be settled bristles with intricate points of institutional development. Yet no account is taken by the disputants of the light that might be thrown on their problem by the application of the modern methods of archæological research. Kittel's work is preceded by an elaborate account of the present state of Biblical criticism, and a reconstruction of the tradition up to Joshua, in which the literary resources are his only resort. Renan's first volume does the same, with the difference only that he indulges in philological etymologising to a greater extent; and in his second volume he gives a *résumé* of Elohist and Jahvist, in which, against all probability, he attributes to the writers the actual origination of the narratives they report. The conditions under which oral tradition works, the normal order of social development, the traces or "survivals" which, as we now begin to know in other cases, are invariably left by past stages of society—all these things are left out of the purview of the literary critics in deciding questions in which these should be the great criteria.

Here seems to me the great opening for English research in the field of Biblical criticism. Where Germany holds the pre-eminence in literary analysis, England possesses almost a monopoly in the methods of sociological research. Literary analysis has done its best, and resulted in a *cul de sac*. Institutional archæology must be called in to carry on the investigation further. Men that live in civil society must do so under certain conditions, which can be observed in analogous cases. We are beginning to know some-

thing of the bonds that bind men together; the beginnings of tribal and family life are being determined with some degree of precision on the lines laid down by Maclennan. We speak of the "tribes of Israel" as if all were known as to the conditions which constituted a man a tribesman of Dan or Benjamin, as the case may be. As a matter of fact, we know nothing of the kind. It is surprising how little we know of the tribal constitution of the early Hebrews. Even as early as Solomon we find it overriden by a system of local government which divided his territories into twelve divisions, presided over by officers (1 Kings iv, 7-19). Yet, when the origin of Numbers xxxvi is to be discussed, in which the question of female inheritance to tribal land is raised with regard to the daughters of Zelophehad, and decided by an evident afterthought, no literary critic thinks of appealing to the archæology of institutions in order to apply the comparative method. The "Mosaic" ordinance is, as will be remembered, that heiresses shall be forced to marry their cousins, so as to keep the property in the tribe. Such a statement raises a number of problems in the mind of any one trained in the methods of Maclennan and Tylor. Does this indicate a general custom of exogamy to which a particular exception had to be made in the case of heiresses; and, if so, was exogamy between tribe and tribe or between family and family? The heiresses were to be married to their "father's brother's sons". Here to the English archæologist is certain proof that the custom arose after the matriarchal stage had been passed through, long after the time, therefore, when stress was laid on descent from Rachel and Leah and their handmaidens. None of these considerations enters the mind of the literary critic, who contents himself with pointing out identities of language with other sources, the whole vocabulary of which does not, perhaps, exceed 400 or 500 words.

Another instance of the queer shifts to which the neglect of archæological considerations leads literary critics may be taken from Mr. Fenton's admirable little book, *Early Hebrew Life* (Pref., p. xvii). Wellhausen, in trying to prove that the Priestly Codex is later than Deuteronomy, comes to the question of tithes. "It is absolutely astounding" (*History of Israel*, Eng. tr., p. 157), "that the tithe, which in its proper nature should apply only to products of definite measure, such as corn, and wine, and oil (Deut. xiv, 23), comes *to be extended* in the Priestly Code to cattle also." I leave out of account the fact, strangely omitted by Wellhausen, that cattle are also mentioned in the passage from Deuteronomy. But

the surprising thing is that he never thinks for a moment of the obvious fact that cattle are the earliest possessions of man, and we might therefore expect tithes of them in the very beginning of legislation. Nor does Dillmann, so far as I can see, make any use of this obvious answer to his opponent. Engrossed in the purely literary questions, they leave out of account the decisive criteria of institutional archæology.

It may be replied that after all it is not much loss if we do not learn much as to the social institution of the early Hebrews. That may or may not be the case, but speaking here of recent research in Biblical Archæology, I could not avoid pointing out the inadequateness of the present methods employed, and in the pages of the *Archæological Review* it is appropriate to point out the need of application of the methods which the *Review* has been founded to illustrate and expound. As for the possible light that may come from such application, it is surely the faith in which we students of the past live that sound and thorough work in any department cannot fail to have its influence on the whole sphere of inquiry. And experience has fully justified that faith by numerous examples where the thorough study of a subject seemingly of little importance has turned out to be the opening up of entirely novel sources of elucidation. Who would have thought that Maclennan's investigations into the original meaning of that simpering nonentity, the "best man" at weddings, were destined to result in a complete transformation of our views about the origin of society? As an instance of the light that seemingly antiquarian inquiries may throw on the deeper problems of the Old Testament, I may perhaps refer, for want of a better example, to my own paper on "Junior Right in Genesis", which appeared in the pages of the *Archæological Review* last July.[1] Primarily my views seem to refer to a point which, even if established, would only be a curiosity of no significance. But, as I showed, the existence of Junior-right among the early Hebrews would account for the existence in Genesis of almost all the so-called "immoral" narratives of the book, and would thus throw more light on the composition of the latter part of the book than any amount of literary analysis which fails altogether to determine the motives with which such narratives were introduced.

That is the peculiar merit of the method of "survivals", that it

[1] The controversies to which it gave rise (see *Athen.*, July 7, 14, 21, Aug. 4, *Acad.*, Sept. 15, Oct. 27, Nov. 3, 10, 17) have only confirmed me in the soundness of my original position. But my experience in this regard is probably not unique.

enables us to recover a whole social system by means of a single relic of it. Like a fossil enables us to determine approximately the fauna and flora of a geological period, so a "survival" gives us information as to whole stages of social development. It is accordingly from the method of survivals that we are to look in the immediate future for most of our information about the Hebrew past. And it is by the method of "survivals" that what little has been reached in the past has been arrived at. Mr. Fenton's excellent little book on "Early Hebrew Life", Prof. Robertson Smith's article on Totem Clans in the Old Testament in the *Journal of Philology* for 1880, and my own paper, almost exhaust the list, so far as I am aware.[1] Nothing has as yet been done on such promising subjects as the tribal constitution of Israel, the relation between the sessile and nomad sections of the inhabitants of Canaan, the hereditary character of crafts (Prof. Sayce threw out a luminous hint recently on smiths), the whole economic constitution of early Israel, with special reference to the system of agriculture. The difficulty in all these cases lies in the scanty character of our materials, but this is all the more reason why we should have resort to the method of survivals, which is at its strongest in dealing with isolated and seemingly discordant facts.

And in our search for "survivals", there is no reason why we should confine ourselves to the bare Biblical records. Hebrew life and institutions did not cease at once on the close of the Biblical canon. Centuries of development intervened before the continuity of the national life was altogether destroyed by the Diaspora under Hadrian in the second century. The post-Biblical records are much more voluminous and full on all archæological matters than the Old Testament, yet the Talmud remains a closed book to Biblical archæologists, and its rich stores of information remain unused; or rather, I should say, that the Talmud, though once opened for this very purpose, has been closed again from a quite mistaken conception of its claims and authority as a guide to Biblical Archæology. The scholars and divines of the seventeenth century knew how to utilize the further stages of development in the Talmud better than those of to-day. Selden, Spencer, Vitringa, and the rest, were better evolutionists than they are given credit for. They used the Talmuds uncritically, it is true, but even then

[1] Much of Dr. Maybaum's work on Priests and Prophets depends on the method of survivals. There are also some points touched upon by Maclennan in his "Patriarchal Theory."

with such excellent results, that their works are still of utility. Spencer's *De Legibus Hebræorum* is still the highest authority on the sacrifices. Yet, in considering the development of the Hebraic legislation, no one seems to think of carrying on the process a step beyond the Biblical epoch by tracing the connection between that and the Talmudic phase. Even in the development of legend, something might be learnt in this way, nor is it improbable that the Midrash contains elements that existed in Bible times.[1]

And if "survivals" existed in Talmudic times, there is reason to hope that some may still be found among the Palestine peasantry at the present day. To take a simple example, the English distaste for horse-flesh, they say, is a "survival" of religious *tabu* of the animal sacred to Odin. Conversely, may we not find traces of the reasons why the coney, for example, was included among the forbidden food of the Hebrews, among the Bedawin and Fellahin of to-day? It is this chance of reflex light on Bible customs by means of "survivals" existing at the present day that makes the new departure of the Palestine Exploration Fund, which has already been referred to more than once, of such extreme interest to those who look to institutional archæology for the key to Biblical difficulties that the literary criticism, now almost exhausted, has been unable to solve.[2]

Another reason why the method of "survivals" is likely to prove so light-giving in the study of Hebrew antiquities, is because it is especially in the region of religious feeling that we find previous stages of development showing most tenacious vitality. And our interest in Biblical Archæology is concentrated on the religious aspects. "Israel for religion, Greece for art and science, Rome for law, England for institutions"—this is the formula which guides us to the particular portions of each nation's life from which we may expect greatest enlightenment. In the case of Israel, we have to remember that religion only began to be differentiated from ritual, from patriotism, from social economy, even from hygiene, at a late stage, and traces of the intermixture are to be found even in the prophetic writings which did most to disentangle *religio* from the other bonds of men in archaic society. In approaching the

[1] The only attempt that I know of to show traces of early legends among the mass of Talmudic ones, is by Dr. Güdemann, in an essay "Midrasch und Midrasch-Haggada", in the Zunz *Jubelschrift*.

[2] It is to be regretted, however, that the questions issued were not submitted to specialists in sociology, or that the Anthropological *Notes and Queries* were not more utilised.

religious development of Israel from the institutional standpoint, we are to expect as much enlightenment from the non-religious element which still remained as from the purer tendencies which were struggling to emerge from the midst of elements which are now seen to be alien by us, but were not so recognised at the times of their emergence. One can see at once how direct a bearing on religious problems would be afforded by an adequate study of *tabu* in early Israel, of the relics of ancestor worship (Gen. xxxi, 42), even of animism. The whole of Hebrew ritual is permeated by such "survivals", as indeed was recognised by philosophic Jewish authorities like Maimonides, who declares that Moses adapted idolatrous practices to a purer worship.

There is another aspect from which the study of survivals of savage life in the Old Testament is instructive in the highest degree. The whole tendency of modern criticism is to lay stress on the Prophets rather than upon the Law as the significant thing in Israel's religious development. M. Renan, who reflects well the tendencies of modern scholarship in this direction, makes this the keynote of his whole treatment of the history of Israel. Now the whole activity of the Prophets is directed against these "survivals of savage life", which can only be adequately studied by anthropological methods. Implicitly this has always been recognised in the statement that "the Prophets thundered against idolatry." But it is the commonest experience that violent opposition of this kind only occurs when there is common ground between the disputants, and we shall have to recognise this common ground in the case of the Prophets.[1] Where they differed was in matters which they saw affected the nation in matters of livelihood and of morals. M. Renan points out that the Prophets were the first Socialists; it was social injustice that fired their souls. And in their opposition to idolatry it was the amount of social degradation encouraged by the foreign or the ancient cults that moved their fierce indignation. As good citizens they opposed "adding field to field"; as fathers of families they protested against the worship of Moloch and Ashtaroth. As a source of explanation of the prophetic activity, the "method of survivals" becomes "the method of opposition".[2]

[1] It has been remarked that the official declaration of monotheism, "Hear O Israel, the Lord our God is one Lord!" (Deut. vi, 4), contains an implicit recognition of polytheism in its emphasis on *our* God. M. Renan sees a survival of this in the German Emperor's phrase, "*Unser* Gott," during the Franco-Prussian war.

[2] In an essay on the Nethinim, *Babyl. and Orient. Record*, Feb.-Mar.

All this will seem distasteful to many who object to having things held sacred for so many generations subjected to analysis and shown to have undergone a course of natural development. As regards the former objection, it may be replied that we claim to understand what we are called upon to revere. Such understanding would probably only give us new causes for sympathy with the prophets and their work. The worship of Ishtar has never disappeared among men, and that of Moloch seems to have suddenly revived. The socialistic aspect of the prophets' work connects it at once with one of the most pressing problems of the hour. With regard to the objection which some persons seem to entertain against tracing development in things sacred, nothing can ever get rid of the fact of individual development, which is equally mysterious, and yet taken as a matter of course. The old Rabbis were wiser in this regard. "Akabiah ben Mahalaleel said, Consider three things and thou wilt not come into the hands of transgression. . . . Know whence thou camest: from a fetid drop; and whither thou art going: to worm and maggot; and before whom thou art about to give account and reckoning: before the King of the king of kings, blessed is He" (Mishna, *Aboth*, iii, 1).

But we need not dilate further on these high themes: the homiletic method is monopolised in other quarters. It is sufficient for our purposes to point out that the present state of Biblical Archæology shows the urgent need of the application of the methods of institutional archæology. There is at present, as we have seen, a pause in Biblical research, because the old methods of literary criticism have been worked out to their minutest results. It scarcely seems possible that the "slicing" process can be carried any further, and matters are now at a deadlock between two opposite schools, who have failed to find any crucial test to decide between them by any further application of purely literary criticism. I fancy I can discern some traces of misgiving on this point in the character of the changes which Prof. Schultz has made in the recently issued fourth edition of his standard work on Old Testament Theology. He is by no means so sure as heretofore as to the exact stages of development in the earlier periods. The

1888, I have endeavoured to apply both methods. From the exceptional degradation of the Nethinim shown in Talmudic "survivals", I was led to conjecture that they were descendants of the *hieroduli* of the Temple. Their existence was then used to account for much of the *sæva indignatio* of the prophets by the method of opposition.

manner, too, in which he emphasises in his Preface the scantiness of the sources, is significant in this regard.

The time seemed opportune, therefore, to plead the cause of other methods which have proved efficacious in tracing out those very developments of archaic law which form the point in dispute between the two dominant schools of Biblical criticism. Such an appeal should come home to English scholars, for the new methods have been chiefly developed in England; and it seemed appropriate to include the appeal in the pages of the *Archæological Review*, founded to promote the study of the past, not only, as hitherto among antiquaries, in its material remains, but also in the development of its institutions.

JOSEPH JACOBS.

THE RISE IN THE VALUE OF SILVER BETWEEN 1300 *AND* 1500.

PROFESSOR THOROLD ROGERS, in his recent work entitled the *Economic Interpretation of History*, has re-opened the question whether there was a rise in the value of silver between the years 1300 and 1500.

The data are not disputed, and are mainly two.

(1) The price of corn remained on the average about the same during the whole period, viz.: 5*s.* 11*d.* per quarter.

(2) The number of grains of silver in the shilling was reduced from 270 to 144 during the period.

The stages by which the weight of silver in the shilling was reduced were as follows:

From	1066–1300	there were	270	grains of silver	in the shilling.
„	1300–1344	„	266	„	„
„	1344–1346	„	244	„	„
„	1346–1351	„	240	„	„
„	1353–1412	„	216	„	„
„	1412–1464	„	180	„	„
„	1464–1527	„	144	„	„

Now, the rough general inference hitherto drawn from these admitted facts has been that the process of diminution in the weight of the shilling followed, consciously or unconsciously, a rise in the value of silver, and that tempting as it must have been to English kings to reduce the weight of the coin as rapidly as possible, they were wise enough not to overdo the process so as to raise unduly the price of corn and other commodities.

But Professor Rogers in former works, and in this last work from his pen, has denied that there is evidence for the rise in the value of silver, and he has maintained the following remarkable hypothesis to account for the facts.

He writes (p. 194):

"The conclusion which I arrived at, and that many years ago, was that payments were made by weight, and not, as now, by tale, that whatever was the weight of the pieces issued by the mint, a man who covenanted to receive or pay a pound of silver for goods, services, or dues, received (*sic*) 5,400 grains up to 1527, and 5,760 afterwards; and that this system lasted from the earliest records down to the restoration of the currency under Elizabeth. On no

other hypothesis could the facts be interpreted, and the question before me was, How could the hypothesis be verified?"

In other words, the Professor maintains that notwithstanding the reduction in the weight of the coin, people went on paying their debts and making their purchases in pounds, shillings, and pence of the old goldsmiths' weight—12 ounces of silver being paid for every 20*s.*, just as if no reduction had taken place.

He gives two, and only two, actual instances in support of this remarkable hypothesis.

"In 1462, Oriel College bought 33¾ ounces of silver plate, some of which was gilt, at 2*s.* 9¼*d.* an ounce, a price entirely impossible by a tale payment."

Was the price so altogether impossible for a payment in tale?

In 1462 there were 180 grains of silver in the shilling. There were therefore 499 grains of silver in 2*s.* 9¼*d.* at that date; and these 499 grains of silver were the purchase-money given for the 450 grains of silver in each ounce of the plate. Where is the impossibility in this payment by tale?

On the other hand, according to the Professor's hypothesis, 2*s.* 9¼*d.* per ounce was paid in the old undiminished shilling of 270 grains of silver. The college therefore, according to the Professor, paid 747 grains of silver for every ounce of 450 grains of plate.

The other instance given is still less conclusive in favour of the hypothesis:

"In 1462 gold was bought at 30*s.* per ounce, the ratio, according to Ruding, between the two metals being as 11.2 to 1 at the time. Such a price is intelligible if the estimate is taken by weight, quite inconsistent with the facts if it is taken by tale."

In 1462 each shilling contained 180 grains of silver. Thirty of these shillings would contain 5,400 grains of silver, which equals 12 ounces of silver given for one ounce of gold, which is not very far from the ratio quoted from Ruding.

On the other hand, on the Professor's hypothesis, 30*s.* of 270 grains each would contain 8,100 grains of silver, *i.e.*, 18 ounces of silver were given for 1 ounce of gold, which is a ratio departing very widely from that given on Ruding's authority.

Now I do not for one moment doubt that important payments were made by weight, as the Professor supposes, and not by tale. So far I believe he is right; but the further fact seems to me to be that in making money payments the weight of silver was reckoned in *pounds, shillings, and pence of the Government standard of the day, that is, of the current coin.* Many years ago I pointed out in the

Fortnightly Review a series of cases open to examination, which seemed to me to prove that this was so.

In the *Memorials of London and London Life in the 13th, 14th, and 15th Centuries,* p. 29, under date 1292, it is recorded that Alan de Corboyl, a goldsmith, acknowledged having received "34*s.* weight of silver and 114 pennyweights of gold, the pennyweight of gold being tenpence in value, and *the value of such gold being* £4 15*s.*"

The pennyweight of gold being equal in value, according to this statement, to tenpence of silver—*i.e.,* the ratio of gold to silver being ten to one—the 114 pennyweights of gold would be worth 1,140 pence of silver, and this is stated to be *in value* £4 15*s.* Surely this *value* must be stated in coin of the period.

So at p. 49 and p. 249, there are numbers of silver articles mentioned, with the amount in pounds, shillings, and pence, given for "*weight and value*". What can this phrase mean unless it is understood to make it clear that the weight is given not in goldsmiths' weight or Troy weight, but in the sterling money weight of the day in which values were habitually quoted?

If there can be any doubt about it, the following cases at p. 350 are conclusive:

"Bought of I. de Chichestre forty-eight esquales and twenty-four saltsellers weighing by goldsmiths weight £76 5*s.* : adding 6*s.* in the pound, with the making, total £109 0*s.* 9*d.*"

"Bought of N. Twyford two gilded basins weighing by goldsmiths weight £15 5*s.* : amounting at 6*s.* in the pound, with the double weight, to £39 13*s.*"

and so on. The method of turning goldsmiths' weight into money value of the day seems in these cases to have been to add 6*s.* in the pound to the goldsmiths' weight. For what can the 6*s.* in the pound be but the difference between the weight of the money of the day and goldsmiths' weight?—26*s.* of money of the year 1371—the date of the record—being equal in weight to 20*s.* of goldsmiths' weight, *i.e.,* 20*s.* of 270 grains, or 5,400 grains. 26*s.* of the year 1371, *i.e.,* of 216 grains=5,613 grains, surely a very close result for a rough and ready calculation.

I think, however, that the most conclusive evidence is to be found in Professor Rogers' own chapter on "The Price of Metals", in vol. iv of his *History of Prices.*

At p. 475 the following instances are given of purchases of raw silver:

"In 1426, 1428, and 1431, the Corporation of Norwich buy silver, in order, on two occasions at least, to decorate the Mayor's sword, at 2*s.* 8*d.* [per oz.]"

Now during these years there were 180 grains of silver in the shilling, and therefore 480 grains in 2*s.* 8*d.*, and this is the exact number of grains in the oz. Troy, which seems to have been sometimes used instead of goldsmiths' weight. That is to say, weight and value were equal. Whereas, if the shilling is to be taken at its original weight of 270 grains, as the Professor argues, the absurd result follows that 720 grains of coined silver were given for 480 grains of raw silver.

Once more, on the same page, another instance is given, which produces the same result:

"In 1523 old silver is sold at 3*s.* 4*d.*"

Now in 1523 the shilling contained 144 grains, and 3*s.* 4*d.* therefore contained 480 grains.

Of course, it is not every instance in which this accurate accordance of "weight and value" is found. But treating the instances given on this page as a whole, there is, by the Professor's own showing, a rise in the price of silver corresponding to the diminution in the weight of the shilling, proving that the prices were quoted from time to time in shillings of the reduced weight of the time, and not in shillings of 270 grains.

Cannot some of the readers of the *Archæological Review* produce other instances which would settle once for all so important a point for the right understanding of Economic History? Professor Rogers (at p. 196 of his work) says:—"On the truth of my hypothesis, entirely verified as I think it is, depends the rational interpretation of English prices." In other words, the economic value of the immense labour involved in the production of his six volumes on the *History of Agriculture and Prices* depends upon the right interpretation of the figures he has given us. Economic students will always be deeply indebted to him for placing permanently on record a continuous series of prices from 1259 to 1702. He has shown to us beyond dispute that prices remained remarkably uniform during the first 250 years of this period, notwithstanding the steady reduction of the number of grains in the shilling. Surely the question whether the prices he has quoted are to be taken as given in shillings of 270 grains, or in the reduced current shillings of the times, is too important a question to be left an open one.

F. SEEBOHM.

A FRESH SCOTTISH ASHPITEL AND GLASS SHOE TALE.

THROUGH an old Shetland friend, Mr. Robert Sinclair of Lerwick—now at Melbourne—a remarkable Scottish version of the *Aschenputtel* tale has reached me, which I have not yet seen printed or heard of anywhere. I owe to that friend already many valuable relics of the folk-lore of his own island home. In answer to one of my inquiries about what he knew of that tale, he wrote to me in July last (1888) from Australia, where he and his family are settled :—

"My son George has procured for me another version of the Aessiepattle', or Cinderella story, from his mother-in-law, who had it from her grandfather, and he in turn had it from his grandmother. His mother-in-law is now an elderly woman. I am not aware that it was ever committed to writing in the family until now. Her native place is a small town not far from Glasgow, in Scotland. I have copied the story and now enclose it. I find there is considerable variation of detail from any other version I have heard of. One most marked is, that it was a raven or ravens that warned the young Prince of his mistake when carrying off the wrong bride. It is, no doubt, of little moment to you, but it proves how a story may be varied and yet bear unmistakable marks of identity and common origin."

The tale thus communicated seems to me of considerable moment, and I give it here word for word, as sent :

* * * * *

Very many years ago there lived a gentleman and a lady in a very beautiful part of the country. They had only one little girl, who was very pretty and very good, and her father and mother were very fond of her. When the little girl was about five years old, her mother died. The father was nearly broken-hearted about the loss of his wife, and left the little girl pretty much to herself. She cried a good deal, and could not understand where her mother had gone that she did not come to her.

After a while her father married a widow lady who had two daughters, both older than the little girl. They were both very

plain, and were jealous of the beauty of their little step-sister. They resolved to try and banish her to the kitchen along with the servants, but the mother was afraid to do that for fear of her husband. She at last devised a plan by which she thought in time to cause her step-daughter's death.

The little girl was very fond of the fields and flowers and sheep. The sheep had found a hole leading into the garden, and the mother told the little girl that she must stay and watch the hole and not let the sheep through, and that she would send her some dinner. When dinner-time came, she sent her out a thimbleful of broth, a grain of barley, a thread of meat, and a crumb of bread.

The little girl was not long till she had finished that, and felt just as hungry as if she had not had anything. She did not dare to go home, as she had been told to stay out till night. She began to cry; and as she sat crying, a little black lamb came up to her and wanted to know what was the matter with her. So she told it she had had no dinner, and was very hungry.

The little black lamb told her not to cry, but to put her finger into its ear, and see what she could find. So she put her finger in, and got a big piece of bread, and the little lamb told her to put her finger in the other ear, and she did so, and got a big piece of cheese, and had a good dinner, and felt quite happy.

In the evening, instead of being tired and hungry, as her step-mother had expected, she was quite bright and cheerful. Next day she was told to go out again, and her stepmother told her she would not send her any dinner. But the little lamb came again, and gave her some more bread and cheese. So the stepmother began to think there was more in it than she knew of; so she sent a man to watch next day.

He saw the lamb feed the little girl with bread and cheese, and went home and told the stepmother. Then she said to her husband she would like to have one of the sheep killed, and he told her she could kill any one she wished. So she had the little black lamb killed.

Next day, when the little girl was sitting crying in the field, a funny little old woman came up and asked her what was the matter; and when the little girl told her about the lamb, she told her not to cry, but to go gather all the bones and bring them to her. She gathered all the bones; but one shank-bone she could not find, and so she gave all the others to the little old woman.

When Sunday came, the girl was left to cook the dinner while the others went to church. The stepmother only left her a

thimbleful of water, a grain of barley, and a crumb of bread, and told her she was to make a big pot of soup. The little girl did not know what to do, and she was sitting crying and wishing for her little lamb; she was sure it would have helped her.

Then in came the little lamb, limping, limping because a shank-bone was a-wanting, and told her not to cry, but to get dressed and go to church, and it would cook the dinner, but to be sure to leave before the church was out. So she went and dressed herself and put on a pretty pair of glass slippers she had.

When she reached the church, service had commenced, and she sat near the door. It happened that there was a young Prince near her, and he was so struck with her beauty he thought he would follow her and see where she lived. But she went out before him, and he was too late. When she came home, she put on her old clothes; and her stepmother and sisters were astonished to find the dinner ready.

Next Sunday she was again left at home, and the lamb came again, and sent her off to church. This Sunday the Prince followed her; and in her haste to get away, she lost one of her slippers. The Prince picked it up and put it in his pocket, finding he could not follow her. The next day he sent out a proclamation that he would marry whoever could get the slipper on. In course of time he came to the house where the little girl lived, and one of her step-sisters said she could get the slipper on. So she took a chopper, and chopped off her toes and a piece of her heel, and put the slipper on.

The Prince put her on his horse behind him to take her away to his castle, where he was to marry her. On the road they had to pass some trees. On the first tree there was a raven, which said:

Haggit-heels and Hewed-toes[1]
Behind the young Prince rides.
But Pretty-foot and Bonnie-foot
Behind the caldron hides.

Then the Prince said: "What did that bird say?"

"Oh," said she, "never mind it! It is only talking nonsense."

However, on the next tree another bird—also a raven—said the same thing. Then the Prince got off and looked at her foot, and found it all blood. He then said he was sure the slipper did not belong to her.

[1] I believe these names, being nicknames for a person, should be written in capitals, as the verb which follows is in the singular.

So he took her back to her mother, and insisted on looking behind the caldron, and there he saw the little girl. She asked to go and change her dress and get the other slipper; and she came down with it on. The Prince recognised her at once, and took her away on his horse, behind him.

When passing the first tree, the bird said:

Pretty-foot and Bonnie-foot
Behind the young Prince rides.
But Haggit-heels and Hewed-toes
At home with Mamma bides.

They rode on and reached the castle, and lived happily ever after, and if they are not dead, they are living yet.

II.

The heroine of this Scottish version, it will be seen, remains nameless. She is simply "the little girl". In the German tale, "a little stumpy Aschenputtel" is the expression used by her own father, when he tries to hinder further search being made for her at his house by the Prince. In the Scottish version, the Little Girl only comes in for a sort of name, as Pretty-foot and Bonnie-foot, given to her by the wise raven.

As in the German tale, she is banished at first to the kitchen. When at home, she hides behind the caldron—even as Aschenputtel, the French Cucendron, the Italian Cenerentola, the Servian Pepelluga, and others, sit in the ashes, in accordance with the meaning of their names. But otherwise the Little Girl's trials mainly happen in the open air. There is a breath of fell and field in this, as in other Scottish versions. This trait also marks a Finnish Ashpitel story, in which, however, the more poetical Germanic kernel of the tale is mixed up with the most horrid Ugrian or Lappish hag element.

The helpful animal in the above variant occurs similarly in the Scottish "Rashin Coatie" story, as well as in the Gaelic tale of "The Sharp (Horned) Grey Sheep." In "Rashin Coatie" it is a little red calf who supplies the bonnie little lassie—the ill-used daughter of a king, and of a queen who had died—with everything wanted. In both these cases there is the same miraculous revival of the friendly beast that has been killed. Helpful animals turn up in many popular tales of cultured as well as of utterly barbarous

nations, being in the former case, probably, a poetical survival from a time of animal worship.

In the earliest story known to us, which has a certain affinity with that of Cinderella, namely, in the tale of Eros and Psyche, as given by Apuleius, we have the main contents of the widespread tale, including helpful insects. There is a king in the classic story, and there are three sisters, two of whom are jealous of the charming Psyche. Among the trials imposed upon her by the revengeful Aphrodite is the task of dividing a mass of mixed grain and seed —wheat, barley, hyrse, poppy, peas, and lentils—so as to pick out each sort into a little heap by itself. "I think," says the spiteful Goddess, "thou must earn thy lover for thyself by industrious work!" A swarm of pitying and sympathetic ants then comes to do the work. Have we not here the pease and the lentils of Aschenputtel aided by the turtle-doves?

The food-yielding ears of the friendly animal we know from Scottish, Norse, as well as Finnish, Servian, and other European stories, even from a Zulu tale. In some cases the horns of a bull or ram are substituted for the ears. As to the Zulu tale, there is no saying whether it may not be rather a recent adaptation of a European one.

The "funny little old woman" of the Scottish variant communicated to me, is apparently a vague echo of the transfigured dead mother of Ashpitel. Whilst in the German, the Finnish, and other tales, the scene of the girl's love adventures is laid in a king's castle, the West-Scottish story before us makes the two lovers meet on Sundays in the church—quite in harmony with the strong theological bias of the people on the other side of the Tweed. In the Gaelic tale, collected and translated by Mr. J. F. Campbell, the Prince is "wishful to see her at the sermon". In "Rashin Coatie" they "go to the kirk".

Apart from this interpolated modern and Christian trait, which is not to be found in the German and other stories, our West-Scottish version has preserved very antique features, some of them reminding us of the Finnish tale from Russian Karelia, others of the Teutonic *Märchen.* Instead of the two white little doves of Aschenputtel, or the nameless bird of other stories, we this time meet with two ravens. The wise birds of Odin—Hugin and Munin (Thought and Remembrance)—readily suggest themselves to the mind.

In Germany the raven has become a bird of ill-omen, through a Christianising degradation from its former status. It often happens

that some portions of an ancient religion thus fall into disesteem, whilst others continue as a living belief under the guise of a tolerated superstition which dogs the steps of the New Faith. In this country the raven still holds his lofty place, as of yore under the ruler of Asgard. Witness the hosts of these birds kept near English country mansions. Their croaking voice is by no means considered an evil sound, as it is in Germany, where on the other hand many forms and figures of Teutonic nature-worship yet haunt hill and dale, forest, field, and stream, lake and sea, even under their old heathen names.

In the West-Scottish tale above given, the two ravens are certainly inconvenient birds for the wrong brides, but knowing, good, and helpful ones to the hero and the heroine of the story. In this way the black-feathered pair maintain the old reputation of wisdom the raven had in the Odinic creed. Before the use of the magnet, ravens, specially prepared for the occasion by a sacrificial rite, were sent out by Northmen from a ship, in order to ascertain the nearness of land. "Odin's Raven's Charm" is the title of one of the profoundest Eddic songs, which in its brief, abrupt mysteriousness contains the old religious lore as in a nutshell. Remembering all this, we seem to have a special Germanic trait in the selection of ravens as warners to the princely bridegroom.

III.

In the tale before us, the ill-treated girl's slippers are, very properly, of *glass*. In "Rashin Coatie" they are "beautiful *satin* slippers". The very word "satin" proves that on this particular point the original story has suffered a modern corruption in Morayshire.

Gold, glass, or crystal (as in the Catalan version) is clearly the material wanted for duly maintaining the tale, let alone the mythical meaning, the solar idea, which may underlie it. In Grimm, the bird on the hazel-tree which has grown from the mother's grave, throws down, on the first day, a golden and silver dress, and slippers embroidered with silk and silver. But on the third day, Aschenputtel gets the decisive slippers, which are *ganz golden*, wholly golden. When the king's son calls at the wealthy man's house, he brings with him the "golden shoe". Thrice this expression "wholly golden", or "golden", is used in that German tale within a few lines, as if to get it well into the listener's mind. The "golden shoe" occurs a fourth time towards the end, when it is

said that the shoe fits Aschenputtel as if the foot were in a mould (*wie angegossen*). It is a well-known storyteller's habit thus to lay stress upon an important point of a tale.

I have pointed out elsewhere that the decisive shoe must have been of such material as to be absolutely proof against yielding to the foot. In the German tale the daughters go into their own chamber with the mother, to cut off their great toe, which they could not get into the all-golden shoe, because, forsooth, a metal shoe cannot by any means be made to yield. Now suppose the slipper had been of fur, or some other soft stuff, instead of solid gold, glass, or crystal, would the story have been possible at all?

Are we to imagine that it would have been a feat beyond the cleverness of two women, secreted in a chamber, to widen a fur or satin shoe, so as to push the foot in, even if it had to be done with a great deal of temporary pain? A fur or satin shoe might burst if the foot were forced into it. Or it might be filled with a cramped or pained foot. Or some trick might be resorted to, by women clever with the needle, to widen the slipper, and so deceive the king's son.

But the story stood in need of an impenetrable material, in order to be likely at all, even on fanciful *Märchen* lines. Women, it must not be forgotten, are mainly the transmitters of these tales. A woman's mind would not easily miss such a point. Hence, even on that simple ground, it is clear that gold, glass, or crystal, must have been in the original tale.

Glass and gold—as I have also pointed out before—are, after all, not so different, etymologically speaking. Golden-coloured amber, as is recorded by Roman writers, was called *gless*(um) by our forefathers; and from that same root the word "glass" is derived. The glistening, glittering, glimmering, glaring, glinting quality is embodied in many *gl* words. So the glass slippper of Aschenputtel may well be a survival from a time when "gless" still in some degree retained the meaning of a more valuable material—whether amber, which so struck the fancy of the Greeks, that Homer[1] compares it to the rays of the sun; or gold itself. *Gless* means that which *gleisst* or glistens. To this day we say, in German, *das gleissende Gold.* Now, amber was at one time valued as highly as gold, or even more so.

Speaking from the most distinct personal remembrance, I can aver that the decisive shoe in this, to me, often-told story—which sticks with wonderful freshness in my memory, after so many

[1] *Odyssey*, xviii, 296.

changes of things—was always a *glass* shoe: not a silk and silver embroidered one; not a fur-trimmed one; nor even a golden one, as in Grimm; though the tale, as told in my childhood, was, otherwise, almost word for word, the same as that in Grimm. Of *glass* the shoe was in the tale as I heard it from peasant girls, who mostly in those days could not even read and write.

Glass, or gold, is certainly an important feature in this tale. Even in Perrault's pitifully modernised and finnikin version, with its early rococo "Moralité" tacked to it, the old tradition is still preserved in this particular point: the slippers are of glass —*verre;* not *vair*, fur. If there has been a corruption in some other tales, it must have been not from *vair* to *verre*, but just the other way—in consequence of a would-be rationalising change, which yet, on closer inspection, proves irrational.

Shoes of glass, or gold, I look upon as a characteristic of antiquity in an Ashpitel story. The Scottish tale sent by Mr. Sinclair shows noteworthy traces of antiquity in the wonderful food-yielding ears of the little lamb, as well as in its magical revival. Quite in accordance with that strongly primitive character which almost leads up to animal-worship, the tale communicated to me keeps to what is, no doubt, the earliest notion about the foot-gear. It does not speak of satin, or fur, but of *glass* slippers. Maybe they once were *gless* ones—amber or gold.

In a number of Northern versions, Scandinavian, Finnish, Scottish (in Anglian speech), and Gaelic, gold or glass is the material—even as in the German tale. In a Swedish version, in which the warning against the false bride's feet is almost in the same words as in Anglian Scottish, we hear of *golden* shoes. Whilst in the Scottish tales we have "Nippit-Fit and Clippit-Fit", or "Haggit-Heels and Hewed-Toes", as the mocking name of the false bride; it is "hacked heels and clipped toes (*huggen häl och klippen tå*) in Swedish; and then it is said "that in the oven is she whom the golden shoe fits."

In Campbell's *Tales of the West Highlands*[1] the Prince gives a pair of golden shoes to the first queen's daughter. Very much as in the German tale (*Rucke di guck, Blut ist im Schuck; der Schuck ist zu klein; die rechte Braut sitzt noch daheim*), the bird in the Gaelic Highland story sings:—"The blood is in the shoe, and the pretty foot is in the nook at the back of the fire." In the end, the golden shoe (*bròg òir*) is found on one of the feet of the right bride.

The translator, Mr. Campbell, who has in so many other

[1] No. 43, "The Sharp (Horned) Sheep."

instances ably shown how Highland tales and songs preserve, under Keltic garb, the poetry, the superstitions, the history, and the race-features of the early Scandinavian conquerors, says in this instance also that the first part of the story, with "the sheep that came alive again and was lame, is like Norse mythology (Story of Thor and the Goats he killed)," and that "the second part is closer to the Norse versions of Cinderella than to the English story."

Perhaps the description, in the West Highland tale given by Mr. Campbell, of the henwife's daughter—who is to be foisted upon the young Prince, in the place of the first queen's daughter—as a "bald *blackskinned* girl" is a further proof of an original Teutonic story underlying the Gaelic one. In the Eddic "Lay of Rigr" the three classes are bodily described: the thralls, the karls (freemen), and the jarls (noblemen). The black skin is noted with other unfavourable traits, as one of the marks of the thralls (*hörfi svartan, hétu thrael*). This slave class was composed of the aborigines of Lapp and Finn blood, who had been conquered by the fair-haired, clear-eyed, white or rosy-skinned Teutons, who came into Scandinavia under their Asic leader Odin. A wealth of long hair is always attributed to the German races by classic writers. It seems, therefore, as if the henwife's "bald black-skinned girl", in the Gaelic tale, were meant to indicate the offspring from a second wife of non-Teutonic blood.

But we must return to the golden shoes.

In the Finnish tale of "The Wonderful Birch",[1] in which the hag plays so large and cruelly weird a part, we have again *golden* shoes. As in the German tale, the King's son gets possession of the girl's foot-gear by having tar put on the threshold. Gustav Meyer, in the Introduction to the book, lays stress on the close connection of the Finnish tale-treasure with the neighbouring Germanic and Slavonian folk-poetry. There is one passage in "The Wonderful Birch" apparently full of meaning. In accordance with the German tale, the ill-treated Finnish Ashpitel receives from the wonder-working tree (which is the transfigured mother herself) splendid garments, but also—and here we come upon a new point—a magic horse on whom she can ride with the swiftness of an arrow over the walls of the King's castle. This horse's hair is "partly golden, partly silvern, *partly even more precious*."

What material could the latter expression mean? And what does Ashpitel's magic horse himself signify?

[1] *Finnische Märchen.* Von Emmy Schreck. (No. 9.)

We know, as before mentioned, that in grey antiquity amber was often prized even more than gold and silver. In the case of Freyr's and Freya's golden-bristled boars (Gullinbursti and Hildiswin), on which these deities ride, gold represents the sun. Even now, the luminous orb is continually called, in German, "the golden sun"—so much so among the masses that these words, and their pictorial representation, are from olden times a favourite sign of German inns. Now, can it be that in the Finnish tale there is a hint as to the varied aspect of the sun's rays, in the threefold luminous hair of Ashpitel's fleet horse—the morning, midday, and evening sun being perhaps meant? Is that horse perchance the Sun, seeing that the wonderful steed, with its shining hair of three resplendent hues, goes with the swiftness of an arrow over the King's castle?

I am loth to bind myself strictly to any Sun and Dawn theory in the interpretation of the Ashpitel tale. Still, this remarkable horse may, like the ravens in the West-Scottish tale, possibly be a mythological survival from very olden times. At all events, the allusion to a material even more precious than gold and silver is a curious point; for the Finnish tale comes from the region of the ancient amber trade—from the close neighbourhood of the Baltic.

IV.

Here I must ask the reader to go with me into a disquisition on amber, calculated to shed light on the glass or golden shoes of the hidden Beauty when she rises, in golden and silver raiment, from the dark ashy-grey abode which had concealed her splendour.

It has been already hinted at in the foregoing remarks, that the glass or golden shoes may have been at first *gless* ones—of golden-coloured amber. The "crystal" in the Catalan Cinderella story is, of course, only another word for glass. A shining, glittering, hard material is thus always mentioned in the genuine tale. Catalonia has her name from the Goths and Alans (Gothalania = Catalonia), as Andalusia has hers from the Vandals. If ever it could be shown—though we can scarcely hope for such a find being made[1]

[1] Yet, by a remarkable find in Spanish archives, the identity of Freia (or Friga) with Holda, which had long been suspected, but which could not be proved, was at last evidenced from a Latin text referring to the ancient creed of the Goths, in which the great Goddess is spoken of as "Friga-Holda."

—that the Catalonian tale is of so old a date as to reach back to Gothic times, the crystal also might be interpreted as a presumable substitute for *gless:* that is, amber or even gold, glistening in sunny radiancy.

The fact is, amber, gold, and the sun are, as will presently be proved, interchangeable terms in ancient mythology. They are interchangeable in Greek as well as in Teutonic myths; the Greek idea having probably, in this case of an eminently Northern product, been engrafted upon an original Teutonic one.

This strange convertibility of terms is seen already, to some extent, in the passage from the Odyssey before quoted. A golden breast-ornament is mentioned there, "set with amber, comparable to the radiant sun." It is probably more than a simple poetical comparison; a mythical notion being, no doubt, hidden in it. *Amber was held to be of solar origin*, in a transmuted terrestrial form. This clearly appears from the story of Phaëthon. The fate of that rash charioteer is wept by his three sisters, the Heliades, or daughters of the Sun, each of whom moreover bears a sun-name (Aigle, Lampetie, and Phaëthusa); and so long do they indulge in wails until at last they are changed into trees, when, as they continue their laments, the tears running from their tree-forms are hardened in the water into electron or amber.

Looked at from the point of view of natural science, we have in this myth a very ancient and perfectly correct rendering of the outcome of amber from the resin of trees, afterwards found in the sea as a hardened material. The story of Phaëthon himself might be explained as that of an earth revolution, in the course of which vegetation was consumed, when amber was the result. Nature myths, generally, contain a great deal of early scientific speculation.

At the same time we have, in this story of Phaëthon, amber in closest connection with the sun; the Heliades producing it as a liquid in their arboreal state, and the shining quality of the precious material being thus explained from a solar source. Nikias, whom Plinius (*Nat. Hist.*, xxxvii, 11) quotes, would have it even in a more direct way that "amber is a liquid generated by the rays of the sun"; and he adds that "it is carried off from the earth by the tides of the ocean, and thrown upon the shores of the Germans."

The Greek myth localises the Heliades, in their amber-engendering tree-shape, at the Eridanus. That has been held sometimes to mean the ancient name for the Po. But Plinius already

combats this assumption, together with other "vain statements of the Greeks", on account of the non-existence of amber at that river. He further says that there are no islands called Elektrides in the Adriatic, as was alleged by the Greeks, but that "amber is doubtless a product of the islands of the Northern Ocean, and called *gless*(um) by the Germans," and that it was originally the gum or resin of a pine-tree. Plinius also mentions that Pytheas of Massilia—who had visited the German Ocean and the Baltic in the fourth century before our era—speaks of the amber trade of the Gutons (Goths) with the Teutons.

Now, it has long been suspected that, instead of the Eridanus, the river Radanus—a confluent of the Vistula near the Baltic, where amber so plentifully came from—was originally in the tale about the weeping daughters of the sun. The sound of "Radanus" and "Eridanus" is similar enough to bring about a confusion. The Greeks, moreover, were great adapters, by set purpose, of foreign myths and words to their own use and tongue. Considering all this, we are thus led up to the likelihood of a northern source of the Heliades' tale.

The sun, it need scarcely be said, was also a deity in the eyes of the Goths and Teutons at Pytheas' time. The "barbarians"—the eminent Greek traveller wrote in a fragmentary passage that has come down to us—"were in the habit of pointing out to us the sleeping-place of the sun." Among the Teutons of Pytheas' time, therefore, the Sun could actually have had daughters. In oldest German the sun is of male gender, different from what it is in our present language. As late as in Hans Sachs, it is once still called "*der* Sunn". However, whether male or female, a Teutonic sun could have daughters as well as a Greek one. Even the most transitory phenomena of the heavens are sometimes looked upon, by early races, in anthropomorphic manner. In an old Shetland rhyme still current, the rainbow has a "fader", a "mider", and a sister who is "brought ta bed o' a gentleman's son."[1] In the Edda, "the Sun has born a daughter, not less beautiful than she herself is."[2] There the Sun is of the female sex.

What prevents us, then, from assuming that the Greeks, who confessedly worked a mass of Thrakian and other foreign myths into their own religion, also took over a northern legend concerning amber, together with that substance itself?

[1] "Discovery of Odinic Songs in Shetland," by Karl Blind. (*Nineteenth Century;* June, 1879.)

[2] Gylfaginnîng.

V.

This northern origin of the Heliades' tale appears to me all the more likely, because there are Skythian and Teutonic names for amber, preserved by the Romans, which easily fit in with the Heliades' myth, or with the general idea of a solar connection of amber. The words in question are *sacr*(ium), and *svalitern*-(icum).

The Germanic kinship of the Skyths clearly appears from a careful comparison of classic writers. It has been upheld by not a few learned men; and it is most ably made out again, with linguistic and other evidence, by Johannes Fressl in his recent remarkable work, *The Skytho-Sakians: the Forebears of the Germans.* He very skilfully explains the Skythian word *sacr* (amber) as tear (Gothic: *tagr;* Old High German: *zahar;* modern German: *Zähre*). I may add: δάκρυμα, lacrima. The author refers, in this connection, to the mythic production of amber from solar tears. Does not this remind us of the tears of the Greek sun-daughters? I think the word *sacal*—used in Egypt, according to Plinius, for amber—may possibly be but another form of *sacr;* Skythian and kindred fair-haired Indo-Germanic tribes having played, as we now well know, an important part in ancient Egyptian history. They may have brought amber there, as well as the word for it.

Another Teutonic, or Skythian, word for amber, besides *gless* and *sacr*, is *svalitern*(icum). Mr. Johannes Fressl ingeniously endeavours to explain it as that which has *swollen* out, or exuded, from a *tree* (Gothic: triu; Old Saxon: trio, treo; Old High German: tar, *ter*, tra). If this hypothesis were correct, *svalitern* would indicate, in Skytho-Germanic speech, the resinous origin of amber.

I suspect, however—as I have more fully stated in a German essay some years ago—that *svalitern* is a name in connection with that Cooling Shield, or screen, called *Svalin*, which in the Edda is said to stand before the sun, so as to prevent the earth from being burnt up by his fierce rays:

> Svalin the shield is hight which stands before the sun,
> The shining God.
> Mountain and sea would, I ween, be burnt,
> Fell it from its place.

In German, Scandinavian, and English, the root of the word "Svalin" signifies, in three gradations of meaning, that which is burning without an open flame; that which is heat-covering, heat-

subduing ; lastly, even simply: cool. (Comp. German : *schwelen:* to slowly burn under cover without a flame; Danish : *swale,* coolness; English : *swale,* shade.) In point of fact, curiously enough, amber was used for heat-subduing purposes. Roman ladies were in the habit of holding amber balls in their hands for the purpose of cooling themselves in summer. This fact must have been known to the northern nations who sold the golden-glittering material to the Phœnikians, the Greeks, and the Romans.

The syllable "tern", again, might easily be explained from the Gothic *tarnjan,* to cover ; Middle High German : *tarnen* or *ternen ;* to which correspond kindred forms in Anglo-Saxon. In the *tarnhût* or *Tarnkappe* (magic hiding hood) the word is still preserved. "Svalitern" would consequently mean the Flame-Coverer, or the heat-subduing, the cooling material.[1]

In Norse mythology, the shield Svalin, being of course translucent, served as a kind of glass screen against the sun, like those now in use for keeping off the scorching glow of a fireplace. Is it going too far to assume that the northern nations would imagine the shield to be of *gless,* that heat-covering, cooling substance which lets the rays of the sun through, and which in the Heliades' tale, whose Northern origin is likely enough, was even believed to be of solar formation ?

Indeed, the screen Svalin, under whose cover the sun burns, is sometimes itself said, in the Norse creed, to be *the* sun. We can only understand that by supposing *Svalin* to have been made of *svalitern,* that is, of amber, whose sunny radiancy and whose solar connection are so much dwelt upon by ancient writers, who manifestly must have had their traditional amber-lore from the country where amber came from. Truly, no great stretch of

[1] An attempt has been made, thirty years ago, in W. Bessell's "Pytheas of Massilia", to explain "svaliternicum" as lignite, because, as Plinius writes, Pytheas had stated that the Baltic Goths used amber as fuel, and sold it to the Teutons for the same purpose. Amber could, of course, not be so used. This is, however, clearly an instance of a misunderstanding, by Plinius, of some details of Pytheas' lost work. Lignite, no doubt, burns without an open flame, and it must have been some material like that—not amber—which was used as fuel by the Goths and Teutons. Evidently two different statements of Pytheas had got mixed up in course of time. However, in the passage where Plinius speaks of *svaliternicum,* he quite correctly says that there are two kinds of amber, one of a white and wax-like colour, the other of a yellowish-red (*fulvum*), which latter is called "svalitèrnicum". These colours exactly fit in with the report of Mr. Otto Helm, the Danzich chymist, in his disquisition on "The Mykenêan Amber", which is proved to be of Baltic origin. (*See* Dr. Schliemann's *Tiryns ;* London : Murray, 1886.)

imagination is required to think that early Teutons, who anthropomorphised the sun, may have looked upon the rounded and radiant amber-balls that floated in their seas, as tears from divine solar forms, perhaps shed at a time when, the shield Svalin being removed, there was such a terrestrial catastrophe as is indicated in the Eddic "Song of Grimnir" (v. 38).

I have gone into this disquisition to show that *gless* (amber), hence glass and crystal, gold, and the sun, are mythically well-nigh identical. The glass, crystal, or golden shoes of the Beauty who rises from ashy darkness into golden and silvern splendour, seem to me therefore a very important feature of the Cinderella story, even though this decisive trait should have been lost in some versions of the tale—as often happens. In the Finnish tale, which on that particular point has preserved the purer tradition, the radiant and golden-shoed Beauty rides on the horse whose mane is partly golden, partly silvern, partly "even more precious", right over the castle walls, as if she and her steed were the bright orb of heaven itself.

Taking all these circumstances into account, would it be too great a wonder if Aschenputtel's slippers had originally been of *gless*, of golden-hued amber? If so, we could easily understand the differentiation of her shoes into glass, crystal, or golden ones, as well as suspect that, after all, the image of the Sun is mixed up with the tale that has for ages charmed so many youthful hearts.

KARL BLIND.

ROBBERIES FROM FAIRYLAND.

Elidorus: The Luck of Edenhall.

THE earliest writer who alludes to the Welsh fairy traditions is Giraldus Cambrensis. His most famous story, the scene of which is laid near Swansea, concerns one Elidorus, a priest. This good man in his youth ran away from the discipline and frequent stripes of his preceptor, and hid himself under the hollow bank of a river. There he remained fasting for two days; and then two men of pigmy stature appeared, and invited him to come with them, and they would lead him into a country full of delights and sports. A more powerful temptation could not have been offered to a runaway schoolboy of twelve years old; and the invitation was speedily accepted. He accompanied his guides into a subterranean land, where he found a people of small stature but pure morals. He was brought into the presence of the king, and by him handed over to his son, who was then a boy. In that land he dwelt for some time; but he often used to return by various paths to the upper day, and on one of these occasions he made himself known to his mother, declaring to her the nature, manners, and state of the pigmy folk. She desired him to bring her a present of gold, which was plentiful in that region; and he accordingly stole a golden ball while at play with the king's son, and ran off with it to his mother, hotly pursued. Reaching home, his foot stumbled on the threshold, and, dropping the ball, he fell into the room where his mother was sitting. The two pigmies who had followed him at once seized the ball and made off with it, not without expressing their contempt for the thief who had returned their kindness with such ingratitude; and Elidorus, though he sought it carefully with penitence and shame, could never again find the way into the underground realm.[1]

Narratives of the theft of valuables from supernatural beings are found all the world over. In this way, for example, in the mythology of more than one nation mankind obtained the blessing

[1] I cite Giraldus Cambrensis from the convenient edition of Sir Richard Colt Hoare's translation, edited by Thomas Wright, F.S.A. (London, Geo. Bell and Sons, 1887), p. 390.

of fire. It is not my purpose now to roam this wide field: I propose to confine my inquiries to the tales generally resembling this one of Elidorus current among Celts and Teutons. Such tales are very common; and the lesson they usually teach is that honesty is the best policy—at all events, in regard to beings whose power is not bounded by the ordinary human limitations. Beginning with South Wales, we find one of these tales told by the Rev. Edward Davies, a clergyman in Gloucestershire at the beginning of this century, who was the author of two curious works on Welsh antiquities, stuffed with useless, because misdirected, learning. The tale in question relates to a small lake "in the mountains of Brecknock", concerning which we are informed that every May-day a certain door in a rock near the lake was found open. He who was bold enough to enter was led by a secret passage to a small island, otherwise invisible, in the middle of the lake. This was a fairy island, a garden of enchanting beauty, inhabited by the Tylwyth Teg, and stored with fruits and flowers. The inhabitants treated their visitors with lavish hospitality, but permitted nothing to be carried away. One day this prohibition was violated by a visitor, who put into his pocket a flower with which he had been presented. The Fairy Family showed no outward resentment. Their guests were dismissed with the accustomed courtesy; but the moment he who had broken their behest "touched unhallowed ground" the flower disappeared, and he lost his senses. Nor has the mysterious door ever been found again.[1]

In both these cases the thief is unsuccessful, and the punishment of his crime is the loss of fairy intercourse; perhaps the mildest form which punishment could take. But sometimes the *chevalier d'industrie* is lucky enough to secure his spoils. It is related that certain white ghosts were in the habit of playing by night at skittles on a level grass plot on the Lüningsberg, near Aerzen, in North Germany. A journeyman weaver, who was in love with a miller's daughter, but lacked the means to marry her, thought there could be no harm in robbing the ghosts of one of the golden balls with

[1] Davies, *Mythology and Rites of the British Druids*, p. 155. Mr. Wirt Sikes quotes this story without acknowledgment, stating that the legend, "varying but little in phraseology, is current in the neighbourhood of a dozen different mountain lakes." As if he had collected it himself! (*British Goblins*, p. 45.) Compare an Eskimo story of a girl who, having acquired *angakok* power, visited the *ingnersuit*, or underground folk, "and received presents from them; but while carrying them homewards the gifts were wafted out of her hands and flew back to their first owners." (Rink, *Tales and Traditions of the Eskimo*, p. 460.)

which they used to play. He accordingly concealed himself one evening ; and when the harmless spectres came out he seized one of their balls, and scampered away with it, followed by the angry owners. A stream crossed his path, and, missing the plank-bridge which spanned it, he sprang into the water. This saved him, for the spirits had no power there ; and a merry wedding was the speedy sequel of his adventure.[1] In like manner a fairy, who, in a Breton saga, was incautious enough to winnow gold in broad daylight in a field where a man was pruning beeches, excited the latter's attention by this singular proceeding ; and the man possessed himself of the treasure by simply flinging into it a hallowed rosary.[2] A Cornish fisherman, one night going home, found a crowd of "little people" on the beach. They were sitting in a semicircle holding their hats towards one of their number, who was pitching gold pieces from a heap into them. The fisherman contrived to introduce his hat among them without being noticed, and having got a share of the money, made off with it. He was followed by the piskies, but had a good start, and managed to reach home and shut the door upon them. Yet so narrow was his escape that he left the tails of his sea-coat in their hands.[3]

Vengeance, however, is sometimes swift and sure upon these robberies. It is believed in Germany that the king of the snakes is wont to come out to sun himself at noon ; and that he then lays aside his crown, a prize for any one who can seize it. A horseman, coming at the opportune moment, did so once ; but the serpent king called forth his subjects and pursued him. By the help of his good steed he succeeded in arriving at home ; and, thankful to have escaped the danger, he patted the beast's neck as he jumped down, saying: "Faithfully hast thou helped me!" At that instant a snake, which had hidden herself unnoticed in the horse's tail, bit the man ; and little joy had he of his crime.[4]

Other tales represent the thief as compelled to restore the stolen goods. Thus a man who found the Trolls on the Danish isle of Fuur carrying their treasures out into the air, shot thrice over them, and thereby forced the owners to quit them. He caught up the gold and silver and rode off with it, followed by the chief Troll. But after he got into the house and shut the doors there was such

[1] Thorpe, *Northern Mythology*, vol. iii, p. 120, apparently quoting Harry's *Sagen, Märchen und Legenden Niedersachsens.*

[2] Sébillot, *Traditions et Superstitions de la Haute-Bretagne*, vol. i, p. 115.

[3] *Choice Notes*, Folklore, p. 76.

[4] Niederhoffer, *Mecklenburg's Volkssagen*, vol. iv, p. 130.

a storming and hissing outside, that the whole house seemed ablaze. Terrified, he flung the bag wherein he had secured the treasures out into the night. The storm ceased, and he heard a voice crying: "Thou hast still enough." In the morning he found a heavy silver cup, which had fallen behind a chest of drawers. Again, a farm servant of South Kongerslev, in Denmark, who went at his master's instance, on Christmas Eve, to see what the Trolls in a neighbouring hill were doing, was offered drink from a golden cup. He took the cup, and casting out its contents, spurred his horse from the spot, hotly pursued. On the way back he passed the dwelling of a band of Trolls at enmity with those from whom he had stolen the cup. Counselled by them, he took to the ploughed field, where his pursuers were unable to follow him, and so escaped. The farmer kept the goblet until the following Christmas Eve, when his wife imprudently helped a tattered beggar to beer in it. It is not wonderful that both the cup and the beggar vanished; but we are to understand that the beggar was a Troll. Perhaps he was.[1] In Thyholm, a district of Denmark, there is a range of lofty mounds formerly inhabited by Trolls. Some peasants who were once passing by these mounds prayed the Trolls to give them some beer. In a moment a little creature came out and presented a large silver can to one of the men, who had no sooner grasped it than he set spurs to his horse, with the intention of keeping it. But the little man of the mound was too quick for him, for he speedily caught him and compelled him to return the can.[2]

Yet ungrateful mortals are sometimes punished, even when they are lucky enough to secure their prize. Thus it is told of a man of Zahren, in Mecklenburg, who was seized with thirst on his way home from Penzlin, that he heard music in a barrow known to be the haunt of the underground folk. People were then on familiar terms with the latter; and the man cried out and asked for a drink. Nor did he ask in vain; for his appeal was at once answered by the appearance of a little fellow with a flask of delicious drink. After slaking his thirst the man took the opportunity to make off with the flask; but he was pursued by the whole troop of elves, only one of whom, and he had only one leg, succeeded in keeping up with him. The thief, however, managed to get over a cross-road where One-leg could not follow him; and the latter then, making a virtue of necessity, cried out: "Thou mayst keep the flask, and henceforth always drink thereout, for it

[1] Thorpe, *op. cit.*, vol. ii, pp. 148, 146, quoting Thiele, *Danmarks Folkesagn.*

[2] *Ibid.*, p. 121.

will never be empty; but beware of looking into it." For some years the elf's injunction was observed; but one day, in a fit of curiosity, the peasant looked into the bottom of the flask, and there sat a horrid toad! The toad disappeared, and so did the liquor; and the man in a short time fell miserably sick.[1] In a Norse tale, a man whose bride is about to be carried off by Huldre-folk, rescues her by shooting over her head a pistol loaded with a silver bullet. This has the effect of dissolving the witchery; and he is forthwith enabled to seize her and gallop off, not unpursued. One of the Trolls, to retard his flight, held out to him a well-filled golden horn. He took the horn, but cast the liquor away, and rode away with both horn and girl. The Trolls, when they found themselves unable to catch him, cried after him in their exasperation: "The red cock shall crow over thy dwelling!" And behold! his house stood in a blaze.[2] Similarly, a Swedish tradition relates that one of the serving-men of the lady of Liungby, in Scania, one night of Christmas in the year 1490, rode out to inquire the cause of the noise at the Magle stone. He found the Trolls dancing and making merry. A fair Troll-woman stepped forth and offered him a drinking-horn and a pipe, praying he would drink the Troll-king's health and blow in the pipe. He snatched the horn and pipe from her, and spurring back to the mansion, delivered them into his lady's hands. The Trolls followed and begged to have their treasures back, promising prosperity to the lady's race if she would restore them. She kept them, however; and they are said to be still preserved at Liungby as memorials of the adventure. But the serving-man who took them died three days after, and the horse on the second day; the mansion has been twice burnt, and the family never prospered after.[3]

Somewhat more courteous was a Danish boy whom an Elf-maiden met and offered drink from a costly drinking-horn one evening as he rode homeward late from Ristrup to Siellevskov. He received the horn, but fearing to drink its contents, poured them out behind him, so that, as in several of these stories, they fell on the horse's back, and singed the hair off. The horn he held fast, and the horse probably needed no second hint to start at the top of its speed. The Elf-damsel gave chase until horse and man reached a running water, across which she could not follow them. Seeing her-

[1] Bartsch, *Sagen, Märchen und Gebräuche aus Meklenburg*, vol. i, p. 83. See also p. 41.

[2] Thorpe, *op. cit.*, vol. ii, p. 6, quoting Faye's *Norske Folke-sagn.*

[3] *Ibid.*, p. 89, quoting Afzelius, *Svenske Folkets Sago-Häfder.*

self outwitted, she implored the youth to give her back the horn, promising him in reward the strength of twelve men. On this assurance he returned the horn to her, and got what she had promised him. But the exchange was not very profitable, for with the strength of twelve men he had unfortunately acquired the appetite of twelve.[1] Here it may well be thought that the supernatural gift only took its appropriate abatement.

There are also legends in which a hat conferring invisibility, or a glove, figures ; but the stolen article is usually, as in most of the instances cited above, a cup or a drinking-horn. Many such articles are still preserved in various parts of northern Europe. Of these the most celebrated are the Luck of Edenhall and the Oldenburg horn. But before discussing these I must refer to some other stories, the material evidence of which is no longer extant. Gervase of Tilbury relates that in a forest of Gloucestershire there is a glade in the midst whereof stands a hillock rising to the height of a man. Knights and hunters were wont, when fatigued with heat and thirst, to ascend the hillock in question to obtain relief. This had to be done singly and alone. The adventurous man then would say: "I thirst," when a cupbearer would appear and present him with a large drinking-horn adorned with gold and gems, as, says the writer, was the custom among the most ancient English, and containing liquor of some unknown but most delicious flavour. When he had drunk this, all heat and weariness fled from his body, and the cupbearer presented him with a towel to wipe his mouth withal ; and then having performed his office he disappeared, waiting neither for recompense nor inquiry. One day an ill-conditioned knight of the city of Gloucester, having gotten the horn into his hands, contrary to custom and good manners kept it. But the Earl of Gloucester, having heard of it, condemned the robber to death, and gave the horn to King Henry I, lest he should be thought to have approved of such wickedness if he had added the rapine of another to the store of his own private property.[2] Gervase of Tilbury wrote near the beginning of the thirteenth century. His contemporary, William of Newbury, relates a similar story, but lays its scene in Yorkshire. He says that a peasant coming home late at night, not very sober, and passing by a barrow, heard the noise of singing and feasting. Seeing a door open in the side of the barrow, he looked in, and beheld a great banquet. One of the

[1] Thorpe, *op. cit.*, vol. ii, p. 142, quoting Thiele. *See* also Keightley, *Fairy Mythology* (Bohn), p. 88.

[2] Keightley, *Fairy Mythology* (Bohn), p. 284, quoting the *Otia Imperialia.*

attendants offered him a cup, which he took, but would not drink. Instead of doing so he poured out the contents, and kept the vessel. The fleetness of his beast enabled him to distance all pursuit, and he escaped. We are told that the cup, described as of unknown material, of unusual colour and of extraordinary form was presented to Henry I, who gave it to his brother-in-law, David, King of the Scots. After having been kept for several years in the Scottish treasury it was given by William the Lion to King Henry II, who wished to see it.[1]

A Cornish tale relates that a farmer's boy of Portallow was one night sent to a neighbouring village for some household necessaries. On the way he fell in with some piskies, and by repeating the formula he heard them use, transported himself with them, first to Portallow Green, then to Seaton Beach, and finally to "the King of France's cellar", where he joined his mysterious companions in tasting that monarch's wines. They then passed through magnificent rooms, where the tables were laden for a feast. By way of taking some memorial of his travels he pocketed one of the rich silver goblets which stood on one of the tables. After a very short stay the word was passed to return, and presently he found himself again at home. The good wife complimented him on his despatch. "You'd say so, if you only know'd where I've been," he replied; "I've been wi' the piskies to Seaton Beach, and I've been to the King o' France's house, and all in five minutes." The farmer stared and said the boy was *mazed*. "I thought you'd say I was mazed, so I brort away this mug to show vor et," he answered, producing the goblet. With such undeniable evidence his story could not be any longer doubted. Stealing from a natural enemy like the King of France was probably rather meritorious than otherwise; and the goblet remained in the boy's family for generations, though unfortunately it is no longer forthcoming for the satisfaction of those who may still be sceptical.[2]

This story differs from the others I have detailed, in narrating a raid by supernatural beings on the dwelling of a human potentate—a raid in which a human creature joined and brought away a substantial trophy. It would be tiresome to narrate the particulars of many more tales in the orthodox form, so I turn at once to the Oldenburg Horn. This famous vessel is still exhibited at the palace of Rosenborg at Copenhagen. It is of silver gilt, and ornamented in paste with enamel. It bears coats of arms and inscrip-

[1] Keightley, *Fairy Mythology* (Bohn), p. 283, quoting the *Chronica Rerum Anglicarum*, lib. i, c. 28.

[2] *Choice Notes*, p. 73.

tions, showing that it was made for King Christian I of Denmark in honour of the Three Kings of Cologne, and cannot therefore be older than the middle of the fifteenth century. The legend attached to it claims for it a much greater antiquity. The legend itself was narrated in Hamelmann's *Oldenburger Chronik* at the end of the sixteenth century, and is even yet current in the mouths of the Oldenburg folk. Hamelmann dates it in the year 990, when the then Count of Oldenburg was hunting in the forest of Bernefeuer. He had followed a roe from that forest to the Osenberg, and had distanced all his attendants. It was the twentieth of July, the weather was hot and the count thirsty. He cried out for a draught of water, and had scarcely uttered the words, when the hill opened and a beautiful damsel appeared and offered him drink in this horn. Not liking the look of the beverage, he declined to drink. Whereupon she pressed him to do so, assuring him that it would go well with him and his thenceforth, and with the whole house of Oldenburg; but if the count would not believe her and drink there would be no unity from that time in the Oldenburg family. He had no faith in her words, and poured out the drink, which took the hair off his horse wherever it splashed him, and galloped away with the horn.[1]

Other drinking-horns, of which precisely analogous tales are told, are still to be seen in Norway. Of the one at Halsteengaard it is related that the posterity of the robber, down to the ninth generation, were afflicted, as a penalty, with some bodily blemish. This horn is described as holding nearly three quarts, and as being encircled by a strong gilt copper ring, about three inches broad, on which, in monkish characters, are to be read the names of the Three Kings of Cologne, Melchior, Baltazar, and Caspar. It is further ornamented with a small gilt copper plate, forming the setting of an oval crystal.[2] Another horn, preserved in the museum at Arendal, was obtained in a similar manner. A father, pursuing his daughter and her lover, was stopped by a Troll, and offered drink in it. Instead of drinking, he cast out the contents, with the usual result, and put spurs to his horse. He was counselled by another Troll, who was not on good terms with the first, to ride through the rye and not through the wheat; but even when his pursuer was impeded by the tall rye-stalks, only the crowing of

[1] Thorpe, vol. iii, p. 128. Kuhn und Schwartz, *Nord-deutsche Sagen*, p. 280. The latter is the version still found as traditional. Its details are not so full, and are in some respects different.

[2] *Ibid.*, vol. ii, p. 15. I am not quite sure whether this cup be now extant.

the cock before dawn rescued him. The vessel is encircled by three silver gilt rings, bearing an inscription, which seems not quite correctly reported, as follows: "Potum servorum benedic deus alme tuorum reliquam unus benede le un Caspar Melchior Baltazar."[1]

The legend of which I am treating attaches also to a number of sacred chalices. At Aagerup, in Zealand, is one of these. The thief, nearly overtaken by the Trolls he had robbed, prayed to God in his distress, and vowed to bestow the cup upon the church if his prayer were heard. The church of Vigersted, also in Zealand, possesses another. In the latter case the man took refuge in the church, where he was besieged by the Trolls until morning.[2] In Bornholm a chalice and paten belonging to the church are said to have been made out of a cup stolen in the same way by a peasant whose mother was a mermaid, and who had inherited some portion of her supernatural power; hence, probably, his intercourse with the Trolls, of which he took so mean an advantage.[3] At Viöl, near Flensborg, in Schleswig, is a beaker belonging to the church, and, like the chalice at Aagerup, of gold, of which it is narrated that it was presented full of a liquor resembling buttermilk to a man who was riding by a barrow where the underground-folk were holding high festival. He emptied and rode off with it in the usual manner. A cry arose behind him: "Three-legs, come out!" and, looking round, he saw a monster pursuing him. Findiug this creature unable to come up with him, he heard many voices calling: "Two-legs, come out!" But his horse was swifter than Two-legs. Then One-leg was summoned, as in the story already cited from Mecklenburg, and came after him with gigantic springs, and would have caught him, but the door of his own house luckily stood open. He had scarcely entered, and slammed it to, when One-leg stood outside, banging against it, and foiled. The beaker was presented to the church in fulfilment of a vow made by the robber in his fright, and it is now used as the communion-cup.[4] At Rambin, on the Island of Rügen, is another cup, the story of which relates that the man to whom it was offered by the underground-folk did not refuse to drink, but having drunk, he kept

[1] Thorpe, vol. ii, p. 14, apparently quoting Faye.

[2] *Ibid.*, p. 144, quoting Thiele. Keightley, p. 109, 111 *n.* The latter mentions another theft of a silver jug where the thief was saved by crossing running water.

[3] *Ibid.*, p. 140.

[4] *Ibid.*, vol. iii, p. 70, quoting Müllenhoff, *Sagen, Märchen und Lieder der Herzogthümer Schleswig, Holstein und Lauenburg.*

the vessel and took it home.[1] In none of these instances, however, do I find any description of the goblet.

Fortunately there is one, and that the most celebrated of all the cups to which a fairy origin has been ascribed, which has been often and accurately delineated both with pen and pencil. I refer to the Luck of Edenhall. It belongs to Sir George Musgrave of Edenhall, in Cumberland, in the possession of whose family it has been for many generations. The tradition is that a butler, going to fetch water from a well in the garden, called St. Cuthbert's Well, came upon a company of fairies at their revels, and snatched it from them. As the little, ill-used folk disappeared, after an ineffectual attempt to recover it, they cried :

> " If this glass do break or fall,
> Farewell the luck of Edenhall !"

The most recent account of it was written in the year 1880, by the Rev. Dr. Fitch, for the *Scarborough Gazette*, from which it has been reprinted for private circulation in the shape of a dainty pamphlet. He speaks of it, from a personal examination, as " a glass stoup, a drinking vessel, about six inches in height, having a circular base, perfectly flat, two inches in diameter, gradually expanding upwards till it ends in a mouth four inches across. The material is by no means fine in quality, presenting, as it does on close inspection, several small cavities or air-bubbles. The general hue is a warm green, resembling the tone known by artists as *brown pink.* Upon the transparent glass is traced a geometric pattern in white and blue enamel, somewhat raised, aided by gold and a little crimson. It will, of course, stand on its base, but it would be far from wise to entrust it, when filled, to this support." Dr. Fitch is in accord with the common opinion of antiquaries in pronouncing it to be of Venetian origin, though Mr. Franks thought it Saracenic. He describes the case in which it is kept as evidently made for it, being of the same shape. " The lid of this case", he says, " rather unevenly fits the body by overlapping it. There is no hinge ; the fastenings are certain hooks or catches, not in good condition ; the security and better apposition of the lid is maintained by a piece of leather, not unlike a modern boot-lace, or thin thong. The case dates, probably, from the fifteenth century, as articles made of similar material, viz., *cuir bouilli*, softened or boiled leather, were much in use in that age. This case bears an elegantly varied pattern that has been recognised in an inkstand of Henry

[1] Jahn, *Volkssagen aus Pommern und Rügen*, p. 53.

the Seventh's, yet extant. Upon the lid of this case, in very chaste and well-formed characters, is the sacred monogram I.H.S." These three letters, which do not really form a monogram, have possibly given rise to the surmise, or tradition, that the Luck was once used as a sacred vessel. Dr. Fitch goes on to quote several authorities, showing that chalices of glass were sanctioned by the church, and were, in fact, made and used ; and the Luck may have been such a vessel. But I can see no sufficient evidence of it. There is nothing to show that the leathern case is of the same date as the glass itself, and it may have been made long afterwards. The earliest mention of the relic seems to have been by Francis Douce, the antiquary, who was at Edenhall in 1785, and wrote some verses upon it ; nor is there any authentic family history attaching to it. The shape of the goblet, its unsteadiness when full, and the difficulty of drinking from it without spilling some of its contents, of which Dr. Fitch had some experience, would point to its being intended rather for convivial than sacred uses.

The hypothesis of the Luck having once been a chalice explains nothing ; because, as we have seen, several of the cups alleged to have been stolen from supernatural beings are chalices to this day. Moreover, what are we to think of the drinking-horns of which the same tale is told? Some of these already mentioned bear, not indeed the sacred letters, but prayers and the names of the sainted Kings of Cologne, though, unlike the cups, they are not found in churches. One drinking-horn, however, was preserved in the cathedral at Wexiö, in Sweden, until carried away by the Danes in 1570. This horn, stated to be of three hundred colours, was received by a knight on Christmas morning from a Troll-wife, whose head he there and then cut off with his sword. The king dubbed him Trolle in memory of the deed, and bestowed on him a coat-of-arms containing a headless Troll.[1] How the horn came into the possession of the cathedral I do not know ; but at all events it could never have been a chalice.

A silver cup, perhaps still used for sacramental purposes at the parish church of Malew, in the Isle of Man, is the subject of the following legend. A farmer returning homeward to the parish of Malew from Peel was benighted and lost his way among the mountains. In the course of his wanderings he was drawn by the sound of sweet music into a large hall where a number of little people were banqueting. Among them were some faces he thought he had formerly seen ; but he forbore to take any notice of them.

[1] Thorpe, vol. ii, p. 91, quoting Afzelius.

Nor did they take any notice of him until he was offered drink, when one of them, whose features seemed not unknown to him, plucked him by the coat and forbade him, whatever he did, to taste any thing he saw before him; "for if you do", he added, "you will be as I am, and return no more to your family." Accordingly, when a large silver beaker was put into his hand, filled with liquor, he found an opportunity to throw its contents on the ground. The music forthwith ceased, and the company disappeared, leaving the cup in his hand. On finding his way home, he told the minister of the parish what had occurred; and the latter, with the instincts of his profession, advised him to devote the cup to the service of the Church.[1] Mr. Train, who quotes this story, states that several similar tales had been placed at his disposal by friends in the Isle of Man; but it was naturally beneath the dignity of an historian to do more than give a specimen of this "shade of superstition", as he calls it. He does, however, mention (though apparently without being conscious of any close relationship with the cup of Kirk Malew) an antique crystal goblet in the possession of Colonel Wilks, the proprietor of the estate of Ballafletcher, four or five miles from Douglas. This goblet was presented to Colonel Wilks by an old lady, a connection of the family of Fletcher, the former proprietor of the estate. It is described as larger than a common bell-shaped tumbler, and ornamented with carved sprigs and white lines. "It is supposed to have been dedicated to the *lhiannan-shee*, or 'peaceful spirit', of Ballafletcher by the former owners of the estate, and to have been held in great esteem, being only used once a year, at Christmas, when the lord of the manor drank a bumper from it to the *lhiannan-shee* of his hearth and domain." As with the Luck of Edenhall, "to break this fragile memorial would have been deemed a great misfortune to the family and displeasing to the spirit of peace."[2]

Here is no mention of the theft of the goblet; but yet I think we have a glimpse of the real character of the cups to which the legend I am discussing attaches. They were probably sacrificial vessels dedicated to the old pagan worship of the house-spirits, of which we find so many traces among the Indo-European peoples. These house-spirits had their chief seat on the family hearth; and their great festival was that of the New Year, celebrated at the winter

[1] Train, *Historical and Statistical Account of the Isle of Man*, vol. ii, p. 154, quoted from Waldron's *Description of the Isle of Man* (London, 1731), p. 126.

[2] *Ibid.*, p. 153.

solstice. The policy of the Church in early and mediæval times was to baptise to Christian uses as many of the heathen beliefs and ceremonies as possible. The New Year festival thus became united with the anniversary of the birth of Christ; and it is matter of history that as the Danes used, previously to their conversion, to drink to Odin and the Anses, so after that event they were in the habit of solemnly pledging Our Lord, His Apostles and the Saints. Such of the old beliefs and practices, however, as the Church could neither impress with a sacred character, nor destroy, lingered on. Among them were the superstitions of the Fairies and the household spirits; and there is nothing unlikely in the supposition that special vessels were kept for the ceremonies in which these beings were propitiated. For this purpose a horn would serve as well as any goblet; if, indeed, it were not actually preferred, as being older, and therefore more sacred in shape and material. As these ceremonies gradually fell into desuetude, or were put down by clerical influence, it would be both natural and in accordance with policy that the cups devoted to the supposed rites should be transferred to the service of the Church.[1] They would all be old-fashioned, quaint, and many of them of foreign and unknown provenance. Already connected in the minds of the people with the spirit world, a supernatural origin would be ascribed to them; and gift or robbery would be the theory of acquisition most readily adopted. Now, theory in a certain stage of culture is indistinguishable from narrative.

I have dealt entirely with stolen goods; but tales of cups and other articles lent or given by elves in exchange for services rendered are by no means unknown. I cannot, however, recall any of such gifts which are now extant; and a discussion of the tales would lead to too long a digression. It were much to be wished that all the drinking-vessels—nay, all the articles of every kind—to which legends of supernatural origin belong were actually figured and described. Much light would thereby be thrown upon their true history. I will only now point out, with regard to the Luck of Edenhall, and the three horns of Oldenburg, of Halsteengaard, and of Arendal, of which we have full descriptions, that what we know of them is all in confirmation of the theory suggested. In particular, the names of the Three Kings connect the

[1] It is not irrelevant to observe in this connection that several of the chalices in Sweden are said to have been presented to the churches by priests to whom a Berg-woman had offered drink in these very cups or bowls (Thorpe, vol. ii, p. 90, quoting Afzelius.)

horns with a Christmas, or Twelfth Night, festival, which is exactly what the theory of the sacrificial nature of these vessels would lead us to expect. If we turn from the actual beakers to the stories, it is surprising how many of these we find pointing to the same festival. The cup of South Kongerslev was won and lost on Christmas Eve. The horn and pipe of Liungby were stolen "one night of Christmas". It was at Christmas-time that the Danish boy acquired his supernatural strength by giving back to the elf-maiden the horn he had taken from her. The Halsteengaard horn, and the golden beaker of Aagerup were both reft from the Trolls on Christmas Eve, and the horn of Wexiö on Christmas morning. The night of St. John's Day is mentioned as the time when the horn now at Arendal was obtained. The saint here referred to is probably St. John the Evangelist, whose feast is on December the 27th. And in more than one case the incident is connected with a marriage, which would be an appropriate occasion for the propitiation of the household spirit.

There is one other matter to which I would call attention, namely, that while stories of the type discussed in the foregoing pages are common to both Celts and Teutons, the stolen cup is exclusively a Teutonic possession. More than that, no authentic record of the preservation of the relic itself is found save in the homes and conquests of the Scandinavian race. Is this to be accounted for by the late date of Christianity, and, therefore, the more recent survival of heathen rites among Teutonic, and especially Scandinavian peoples?

E. Sidney Hartland.

NOTES FROM PARLIAMENTARY PAPERS.

No. 6.

REPORT BY MR. F. S. A. BOURNE OF A JOURNEY IN SOUTH-WESTERN CHINA, through the Provinces of Ssŭ-ch'uan, Yün-nan, Kwang-si, and Kuei-chou, from October 26th, 1885, to May 5th, 1886.

Part I.—Ch'ung-ch'ing Fu to Pi-chieh Hsien.

ON the road from Na-chi Hsien I noticed for the first time square pillars of stone, carved at the top to represent the head of Amita Buddha. At a distance they look just like terminal statues, but a closer view dispels all thought of classical sculpture. They are most grotesque and hideous images.[1] Many were loaded with straw sandals, the votive offerings of porters whose prayers for the relief of sore feet or aching backs had been answered.

About six miles beyond Ma-ling, on the right of a narrow valley, down which the road passes, a sandstone bluff comes into view presenting the interesting spectacle of about twenty Man-tzŭ caves. Most of the entrances, three to four feet square, are cut in the vertical cliff some ten feet above the ground, so that they are not to be reached without a ladder, and we had no time to wait. These caves may richly reward the otiose explorer, for no Chinaman would ever think of taking the trouble necessary to disturb what they contain. The face of the cliff, beside the portals, is adorned in one or two cases by sculptures in relief, the most striking being a round human face, which at once recalled to my mind a print in Smith's *Classical Dictionary*, representing the sun (from a coin of Rhodes). Other caves were accessible, and proved to be cut in the solid rock (sandstone) about eight feet square, with a domed roof some 5 ft. 6 in. high in the centre. These caves are cut on exactly the same plan as those described by Mr. Baber, common in South Ssŭ-ch'uan, and are called by the same name, *i.e.*, "Caves of the Man-tzŭ." My hopes were raised by a heap of earth in one cave, that had evidently been deposited there with a purpose, and I was considering how to get the earth turned over without attracting the attention of the neighbours, when a villager

[1] These cannot be intended to represent Amita Buddha as he is never associated with hideous images [Ed.].

remarked, "We buried a beggar there last year. There was no coffin for him, so we put him in the cave and covered him with earth." This valley was, no doubt, formerly the head-quarters of a Man-tzŭ tribe, for some miles lower down the site of the castle of a Man-tzŭ Chief (Man-tzŭ Wang) is pointed out. Not one stone remains upon another; but the sculptured blocks that lie about the garden of a farmhouse, just built over the site, bear witness to a considerable advance in civilization. There was a stone lintel, measuring 5 feet by 1 ft. 6 in., by 9 inches, very evenly cut and adorned with a simple pattern much resembling that figured by Mr. Baber (p. 137).

After Hei-ni-shao the road runs through a district of bare limestone hills, uncultivated for the most part, and without trees. Here we passed a terminal of Amita Buddha with quite negro features, decked with an immense number of votive offerings, including many pairs of paper eye-glasses, *one pair on.* After a mile or so of steep bad road we reached a Buddhist monastery built at the highest point in a pass through a range that runs east and west—the Hsüeh Shan, marked Su Shan on European maps. The pass I make 5,550 feet above the sea; there hung in the monastery an antithetical couplet, presented by an official early in the century, which may be paraphrased as follows:—

To have a nature broad, strong, and under control is to be God ("Ti"), and Prince, and Spirit and Buddha: to be of high virtue is to be Ruler, and General, and Prophet, and God ("Shên").

In countries where religion is taken seriously, one might be astonished that such a Catholic text should figure in a Buddhist temple dedicated to the God of War.

At a village named Pai-ai, I saw for the first time Miao-tzŭ, or aborigines of Kuei-chou. Next to nothing is known in Europe about the non-Chinese races of southern China, although they probably form much more than half the population of Yün-nan and Kwang-si, and are very numerous in Kuei-chou and Western Hunan, a rich district lying between the 22nd and 28th degrees of latitude, and larger than France in area. The subject is as interesting from the point of view of science or history as from that of politics and commerce.

Part II.—Pi-chieh Hsien to Yünnan Fu.

On the 12th November, at Ta-chê-p'ing we met numbers of Lolos, or, as they are here more politely called, I-chia (barbarian families, see Lolo Vocabulary, No. 1).[1] They are very

[1] These vocabularies are appended to Mr. Bourne's Report.—ED.

numerous in this part of the plateau; the men wear the Chinese dress, and can usually speak Chinese. There being no mining to inspect at T'ang-t'ang, I went for a walk with my Chinese clerk to inquire about the Lolos, and if possible discover a man who could write their character, when, while standing in the dry bed of the stream that runs past the village, I saw a man riding down a mountain-path on a good pony, with big brass stirrups, and two mounted servants behind him. A boy who was following me thereupon said, "You were asking about the I-chia; look, there is the T'u-ssŭ (aboriginal chief) coming into town." I went back to the inn at once, and sent my writer to make friends with the T'u-ssŭ, and, if possible, bring him in to see me, which he succeeded in doing.

The T'u-ssŭ was a heavy-featured, stolid man, with whom it was difficult to make way. After time and native spirit had taken the edge off his dulness and suspicion, he gave us an account of the wrongs he and his tribe had suffered lately at the hands of the Mahommedan Chinese who were encroaching on his lands, ending with a request that I would go and see a youth of his tribe who had just been half killed in an affray. We found a youth of eighteen, who had just been brought into the village for treatment, lying on a leather mattress spread on the floor in the middle of the room, alongside a wood fire. He had bad sword cuts on the shin, knee, and wrist. The wound had been covered by an aboriginal practitioner with a plaster of simples, which it would not have been prudent to remove, so I gave him the safe advice not to drink and smoke too much, and left some carbolic oil to be applied when the dressing was removed. The T'u-ssŭ was now my friend, and invited me to go back with him to his place in the country, within a few miles of which there lived, he said, a *perma*, or sorcerer, who could write the Lolo character.

We had gone on thus for about three hours, but our host still said his house was far ahead. About eleven o'clock my servant urged that we could go no further, as we should not have time to get back to the inn, a matter of some importance to him, for he would not touch food in the houses of the Lolos, for fear of being poisoned. Just as I had decided that we must turn back, we came in sight of a cottage, which our host indicated as the abode of his sorcerer, where I persuaded him to introduce us. The *perma* was unfortunately thirty miles away, officiating at a funeral, but his wife and brother were in the house, and five or six other Lolos

soon arrived from cottages higher up the hill. The distance of the chief's house still remaining an uncertain quantity, I excused myself from going further, and set to work to learn what I could from the Lolos present.

As it was cold and we were wet through, wood was thrown on the fire, round which we sat eating walnuts—the only food to be got. The Chief lay down and smoked opium. About the sounds given in the Vocabulary of these people's language I am fairly confident, because the six or seven Lolos present were all agreed about them. The *perma's* brother, our host, could not write ; but he professed to be able to pick out a character here and there in his brother's MSS. I copied the characters from his indication, but he was not very clear about them, and they must be accepted with some doubt. [We do not give the characters, as they are known to philologists.]

The brother told me that the MSS. contained nothing but religious forms, charms, and such like—the only purpose, so far as I have heard, for which the Lolos employ their writing. I now begged one of the MSS. The wife and brother of the absent *perma* both saw insuperable obstacles, but the T'u-ssŭ overruled their objections and insisted that I should have one. This MS. is now in the British Museum.

These Lolos had bigger and more irregular features than average Chinese. The colour of the skin seemed much the same, but the eyes were sunk deeper. They are divided into three tribes, known in Chinese as "Hei", "Pai", and "Kan" (Black, White, and Dry) Lolo, or I-jên, a meaningless distinction, but corresponding to a real tribal division apparently. They believe in a future state of retribution, burn the dead, worship their ancestors with the sacrifice of an ox, and have no idols. Four pieces of brown paper were said to represent the potentialities of the other world, and three sticks of bamboo their ancestors.

Between Hsüan-wei Chou, the first town in the Yünnan province, and Chan-i-Chou, we met a man carrying a weapon I had never seen before, but which I found afterwards to be very common all over the Yünnan province. It is a rod of iron about three feet long, with a sword-handle at one end, and at the other a bar at right angles to the rod about five inches long, pointed and sharpened on the inner edge. Asked what it was for and how used, the man replied for men or wild beasts, it would give a stab by striking or a cut by pulling. This weapon is called *kou-lien* (hook).

The race of the population of the city of Yünnan Fu, the

capital of the province, would be an interesting study. There are strong differences from the Chinese type, and many of these people with long straight noses and regular features would appear strange Chinese at Canton or Shanghae. The mixture is probably Lolo or Turk (Mahommedan). The Lolos stretch from their home in South-west Ssŭ-ch'uan to the borders of Burmah and Tonquin, and perhaps beyond. The variety near Yünnan Fu, the Sa-la Lolo, is a somewhat debased branch of that extended race. Of the Mahommedans, there are two stocks in the Yünnan Province, centred in Ta-li Fu and Lin-ngan Fu. The former profess to be sprung from Mahommedan soldiers of Genghis Khan, who were settled in Western Yünnan in the thirteenth century by Sa-ha-ma-ting and by the Prince of Hsien-yang (Hsien-yang Wang), lieutenants of that monarch: the latter are said to have migrated from Shensi. Some Mahommedan families can trace their genealogy back to one or other hordes without a break. Their family names (Hsing) are usually one of the following syllables, which are said to represent foreign words, Sa, Ha, Ma, Na, Hu, Su, Sai. I had not the time that the subject deserves, but the traveller cannot fail to be struck by the very un-Chinese appearance of some of these Mahommedans.

Part III.—Yünnan Fu to Ssu-mao T'ing.

Between Hsin-hsing Chou and Hsi-ê-Hsien, and in a less degree thence on till the descent to the Yuan River begins, the country is resplendent with flowering trees and shrubs. There is scarcely any cultivated land to be seen from the road, although the eye frequently commands a broad expanse, the country being very broken. Indeed, this part seems almost uninhabited; but I was several times assured that, in parts secluded from the road, there are many villages of non-Chinese tribes, probably of the Lolo family.

Yang-mao-ch'ung is a remarkable place. It is situated in a narrow valley, almost a defile, which appears from the *débris* lying all over it to be flooded in the rains, although the only sign of water we saw was the dry torrent bed. On both sides it is shut in by hills that rise 1,000 to 2,000 feet above it, with the pass by which we descended at the back. The rock is a red, decomposed granite or syenite, which falls to pieces when touched. Miasma is said to float about here in red and blue clouds in spring and summer, and to be very deadly. The village consists of a few houses of a pattern that we had none of us seen before; instead of the pic-

turesque Chinese gables and tiles, they have perfectly flat roofs of hardened clay. When we entered the inn-door there was revealed a rectangular space, very dark; a shaky ladder led up the 8 feet that separated the earth floor from the horizontal timbers that supported the roof; and at the top one found oneself on a flat beaten earth surface, with the sky above and similar planes—roofs of other houses—all round. A second story sometimes covers a part of this surface, pleasant to live in when the sun is not hot, because one can step out on to the roof and see what is going on. I could get no better account of the history of this form of house than that it was an aboriginal contrivance, which the ignorant Chinese had copied. It seems, however, to be a concomitant of the Lolo family;[1] the population here is chiefly Lolo, although dressed *à la Chinoise*. Can the earthen house be the attempt of a cave-cutting race to live in a cave in a soft stone country, far away from the limestone bluffs where cave-cutting took its rise? It was perhaps considered indecent not to live in a cave.

P'u-êrh Fu is the chief city of the southern of the three circuits into which the province of Yünnan is divided. It was only in 1730 that this Prefecture was established and the country brought under the direct rule of China. It had previously formed a part of the territory of a people referred to in Chinese history as the Chin-Ch'ih—Golden Teeth—being also called Ch'an-li or Ch'ê-li, the name of their country. These people are now called Pai-i by the Chinese, and Shans by the Burmese. The *Topography of Yünnan* says:—

"I-yin (B.C. 1766) records that the Ch'an-li brought presents of elephants' tusks and short dogs (?). This district belongs to Ch'an-li, and had formerly no relations with China. In A.D. 1293 the Golden Teeth, who had recently given in their allegiance, supplied fodder and corn to Mang-wu-t'o-êrh when he had lost the road of exit for his army. In 1387, under the first Emperor of the Ming dynasty, an officer called Hsüan-wei Ssŭ (officer for diffusing tranquillity), was appointed to control the district of Ch'ê-li. In the seventh year of Yung-chêng (1730), the present district of P'u-êrh, with the six great tea hills, Kan-lan-pa, the six districts ('pan-na') was constituted into the Prefecture of P'u-êrh Fu, the six districts ('pan-na') on the south of the Me-khong to remain under the jurisdiction of the Hsüan-wei Ssŭ, who was to pay tribute for them yearly at Yu-lê." (The

[1] Several times we found Shans living in such houses, but the typical Shan house is very different.

Yu-lê official was moved to Ssŭ-mao in 1736, where this tribute is probably now paid.)

The political divisions of the country to the south of Ssŭ-mao are difficult to comprehend ; indeed, no one seems to know exactly what they are: and the geographical scarcely less so, because of the confusion caused by different names for the same place.

Politically, the great fact is the existence of the small Princedom of Ch'ê-li, the ruler of which is called by the Chinese the Ch'ê-li Hsüan-wei Ssŭ, *i.e.*, Ch'ê-li officer for diffusing tranquillity, and by the Burmese the Chiu-lung Wang, *i.e.*, Prince of Nine Dragons (or perhaps, of the Nine Dragon River, *i.e.*, the Me-khong). I have referred above to the history of this kingdom.[1] The former seat of the Ch'ê-li ruler was at Chiu-lung Shan, 5 li from the right bank of the Me-khong, but he now resides at Hsiao Mêng-yang, on the left bank, six days' journey to the south-west of Ssŭ-mao. Under him are thirteen districts called "pan-na" or "mêng".[2] Over each of these "mêng" there is an officer with the hereditary rank of Lieutenant (Ch'ien-tsung or Pa-tsung) in the Chinese military service. Over the districts "mêng" on the left bank the Chinese magistrate at Ssŭ-mao seems to have concurrent jurisdiction with the Hsüan-wei Ssŭ. The Chinese regard the State of Ch'ê-li as a screen ("fan-li") to protect the Celestial domain from the Burmese and Siamese States on the south, and do not concern themselves much with what is going on beyond the river. The commandant at Ssŭ-mao told me that the Ch'ê-li Hsüan-wei Ssŭ was a person of much consideration, civil in front, military behind, Chinese on the left hand, and Burmese on the right, ruling a territory that extended several days' journey in all directions. In 1884 the Chinese asserted their authority through Ma Chung, the general at P'u-êrh, in a rather questionable manner, by the "removal" of the Hsüan-wei Ssŭ, and also of the officer (Pa-tsung) of the Liu-k'un district.

Outside the Ch'ê-li State we heard of Lao-chua, whence cotton

[1] The following are further notes with regard to Ch'ê-li taken from the "Topography": the Ch'ê-li district is 745 li to the south of P'u-êrh Fu During the Ming dynasty there was a Prefect of Protected Aborigines. In the reign of Chia-ching (A.D. 1522) the district became subject to Burmah. The present dynasty annexed the district, and re-established the officer (Hsüan-wei Ssŭ), with jurisdiction over the aboriginal officers of the thirteen "pan-na". In 1836 the Hsüan-wei Ssŭ, named Shêng-wu, who succeeded T'ai-ho, having quarrelled with his uncle T'ai-k'ang, and having run away with the seals of office, the son of T'ai-k'ang, named Chêng-tsung, was appointed in succession to T'ai-ho.

[2] Probably a Shan word.

comes, but which is little visited by merchants because of the ferocity of the natives, who set cross-bows with poisoned arrows to shoot across the road, or, rather, are said to do so by the Chinese, which is not the same thing; and of K'a-wa, where the natives tattoo themselves, and worship an image made of the heads of a tiger and of a man both newly killed.

In strolling through the market-place at Ssŭ-mao it was evident that several different races were represented even among men dressed in the Chinese fashion. The fact is that the men of the 141 aboriginal tribes, who, according to the *Yünnan Topography* inhabit the province, almost all wear the Chinese dress, while the women, who stay at home, wear the tribal costume. Almost the only tribal costumes I noticed were those of the Ma-hei, who are Lolos, and dress in black with silver ornaments, and of Pai-i (Shans), of whom there were a few women about. The Shans were bare-footed, dressed in a garment something between a kilt and a petticoat, reaching nearly to the ankles—green for a foot all round at the bottom, with stripes of yellow, red, and black above. They wore large round ear-rings of horn that displayed a disc the size of a florin on each side of the lobe of the ear. The head was wrapped in a chocolate-coloured turban.

I had some trouble in getting hold of men of non-Chinese races to inquire about their languages, as if accosted in the open street they were suspicious (for why address strangers in that way?); and in the house free intercourse was made difficult by the presence of two braves with obstructionist orders. Fortunately, a few days revealed the curious fact that these men passed their day with a uniformity quite invariable. After dinner they smoked opium, and gossiped with that gushing triviality peculiar to opium-smokers till midnight. They chose a place to sleep where the sun shone upon them as soon as it rose. Here they might be seen any morning from 7 to 10 sleeping in the open court with their glittering feet sticking half-a-yard outside their blankets. So one morning early I sent a servant out to find an aboriginal.

The servant returned with a slightly-built but muscular man, with well-shaped head and most intelligent face, made interesting by a curious wary expression hard to describe. He wore a huge black turban, but was otherwise clad like an ordinary Chinaman. He turned out to be the priest or sorcerer of a Lolo village named Na-ni-pa, 30 li west of Ssŭ-mao. He was just the sort of man I had missed in Kuei-chou. A few words showed that he spoke the same language as the Lolos of Ssŭ-ch'uan, Kuei-chou, and Northern

Yünnan. Besides the general resemblance, which will appear very great, considering that Ssŭ-mao is at least 450 miles from T'ang-t'ang, and that the Ssŭ-mao Lolos have no tradition whence they came, the nasal gutterals and Welsh aspirated l's were unmistakable.[1]

On being shown the Lolo manuscripts printed in Mr. Baber's book, the man said that he could not make it out, although he was sure it was Lolo writing, as he could recognise many of the characters. He offered to take a leaf home with him and show it to an old sorcerer ("pĕr-ma"), who was bedridden, and who might understand it, and promised to bring one of his own books to show me. Next day he returned with the leaf, of which he said the old "perma" could make no sense, although he could read the characters; and he brought also one of his own manuscripts. It was a ritual divided into sections proper to various religious occasions, *e.g.*, one division was to be read to purify a house after a man had died there. It consisted of chants in five character lines rhyming, and contained besides a list of the surnames of the tribe. Unfortunately, the education of my friend had been neglected, for his father, also a "pĕr-ma", had died while he was too young to have completed his studies. Thus, although able to read his prayer-book, he could not explain what it meant. In his own opinion this was not important, as the ritual had been arranged between his ancestors and the gods, who knew very well what was meant so long as he read the right section and gave the characters their proper sound, of which he said he was certain. Unfortunately, all my notes of conversations with him are lost, except a few sheets upon which I got him to write all the characters he could remember, adding myself beneath each its sound in English. This document was picked up in my house after the looting, and is forwarded with this report. The sounds are written as far as possible according to Sir T. Wade's system—the figure "5" standing for the "ju-shêng"—the tones are but approximate.

It appears that Lolo is a language of the Chinese type, with a small number of monosyllabic or dissyllabic words helped out by "tones". The writing is probably also like the Chinese in being an ideographic system based on picture writing; but the Ssŭ-mao "pĕr-ma", not knowing all the characters, employed one character of a certain sound to represent all the others with the

[1] *See* Baber Supplementary Papers, p. 72. Mr. Gray Owen, a Welsh missionary, tells me that he remarked the same characteristic in the speech of the Lolos at Sung-p'an T'ing in North Ssŭ-ch'uan.

same sound, as "kung" (labour) might be written in Chinese for "kung" (merit), "kung" (pnblic), etc. This was the view the "pĕr-ma" himself took.

The Pai-i, as the Shans are called in this part, are divided into "water" and "dry", but they speak the same language. Shan No. 1 is a vocabulary taken from a Shui (water), Pai-i who came from the Mêng-la district to the south-west of Ssŭ-mao.

Lolo No. 4 is a vocabulary taken from a man of a tribe called Ma-hê by the Chinese, who have only immigrated into the neighbourhood of P'u-êrh Fu within the last six years from the east; they number here a few hundred families. They are very timid, and seem to be a debased Lolo tribe.

On the 12th January I sent my Writer to visit a Burmese temple (Mien-Ssŭ) situated about four miles south of Ssŭ-mao, and forming part of a castle belonging to the Liu-k'un T'u-ssŭ. The priests in this temple were dressed in yellow, and spoke a language which, as the Writer repeated the sounds to me, was undistinguishable from Shan No. 1. They have a writing of their own, but I am sorry to say that the two specimens which I obtained were lost in the riot. They described themselves as Burmese subjects, but said they bore a heavy yoke, having to pay taxes both to Ssŭ-mao and to Ch'ê-li. My Writer, who has been in Burmah, described the castle and temple as quite Burmese in construction.

On the 9th January, a beautiful day, I went, at the invitation of our Lieutenant Ch'ü, to see a camp said to have been constructed by K'ung-ming, who conquered the south, planted the tea tree king, and discovered charcoal and the nature of barbarians in the third century, A.D. We were a large party, for many of the coolies came to pay their respects to their Ssŭ-ch'uan hero. The camp is half-a-mile to the south-west of the city, surrounded by a double embankment and a ditch. There was a temple to K'ung-ming close by, but the tablet had been knocked to pieces during the rebellion, and we could discover no date. The Mahommedans had spared the image of the hero, however, which represented a man of heavy Mongolian features holding a fan; a youth on his proper right presented a sword, and one on the left a book. The camp covers many acres, and is splendidly situated on probably the last plain of the plateau before the descent to the Me-khong. This Ssŭ-mao plain is said to be 10 miles long by 2 to 3 miles wide. It is remarkably level for this part, surrounded by gently rising hills, and evidently healthy

(4,480 feet above the sea). In fact we all thought K'ung-ming's men must have been in clover.

We returned along a pleasant country lane with high hedges on each side, through as fruitful, pleasant a country as one could wish. We passed a temple containing a horrid image, seated on a white ox, with a sash composed of human heads round its breast, and armed with a trident and bell. It had six arms covered with snakes, and three faces with the usual scar in the middle of the forehead replaced by an eye. An intelligent native told us it was the local god; and, to the remark that he was of dreadful aspect, he replied, "Yes, he is just like that." Such a deity ought to be able to keep order. The artist who designed this image must have borrowed some of his ideas from the south, as none of my men had seen such an idol before.

We next visited a temple to the city god, where all the tortures of hell were represented in clay figures, the wicked being sorted out into classes in the most methodical manner, *e.g.*, in the matrimonial department an unfortunate dame might be seen bound in position between boards at face and back, while she is sawn asunder by two fiends, one at each end of the saw, who are straining every nerve to keep precisely to the median line.

Part IV.—Ssŭ-mao T'ing to K'ai-hua Fu.

On the 13th January we left Ssŭ-mao with the intention of coasting along the Tonquin border to Nan-ning Fu in Kwang-si, a design which, in spite of the recent hostilities, we had the good fortune to carry out. A straight course would have taken us almost due east to Mêng-tzu Hsien, directly above Lao-Kai; unfortunately, there intervenes here a wide block of country across which there is no road, and about which next to nothing is known. Roughly, the space lying between the Pa-pien River on the west, Yuan-chiang Chou on the north, Mêng-tzu Hsien on the east, and Tonquin on the south, having an area of something like 6,500 square miles, is ruled by aboriginal Chiefs ("T'u-ssŭ") nominally subject to Lin-ngan Fu. These aboriginal rulers number twenty-five, and the tribes under them are said to be Lolo, Wo-ni, P'u-la, P'o (pai) i, Sha-jên, Nung-jên, and T'u-lao; the first three of the Lolo and the rest of the Shan family, I expect. To judge from the altitude reached in crossing this same fork of land between the Pa-pien and the Yuan Rivers higher up, and also from the feeble hold the Chinese have here, this tract is probably

very mountainous. I was told that there were Lolos here who wear their tribal costume with the hair in a horn. Unfortunately, their being no road through these wilds, we had to follow, as far as Yuan-Chiang Chou, the road by which we had come.

At Na-k'u-li, the first stage from Ssŭ-mao, we met a man of the tribe called Pu-tu by the Chinese. The vocabulary taken from him shows that the Pu-tu are Lolos closely related to the Ma-hê.

On the 18th January, at Shên-kou, I met some people of the K'a-to tribe, whose language shows that they belong to the Lolo family.

As we approached T'a-lang, we met numbers of women of the Wo-ni tribe returning from market, wearing a huge square head-dress of black cotton projecting in front of the head. The Wo-ni are very numerous between Yuan-chiang and Ssŭ-mao. My vocabulary of their speech is lost; but it appears from the notice of them in the *Topography* that they belong to the Lolo family, and are nearly allied to the Pu-tu and K'a-to. The women of all three tribes dress in jet black cotton.

At Pei-yin-shan we had to stop a day to make bread, etc., and give the coolies a rest, for we had travelled eight days on end, as much as could be managed. We stayed in a large inn with a big stable below (all traffic on this route is by caravan of pack animals), and well-filled store-rooms above, kept by a Min-chia family. I had made the acquaintance of the landlord and his sons when staying in the village on the way to Ssŭ-mao. We now had the opportunity of studying the economy of a Min-chia household. Compared with the Chinese, the most striking fact is, that the women do all the work; the first thing we saw on reaching the inn door was the daughter of the house, coming up a steep path carrying along her back a bamboo tube as big round as herself, fastened to a wooden collar supported upon her shoulders; it turned out that she was bringing water from a spring lower down the hill. The women were dressed in homespun cotton, dyed a deep black; their ornaments, bangles, earrings, buttons, etc., were of plain silver. Their agility, sleekness, and easy natural manner, set off by spotless black and shining silver, made a pleasing impression on our party. The landlord showed me with pride his store of corn, wine, and oil, the sides adorned by rows of bacon. He told me there were about 300 Min-chia families in this neighbourhood, and that they had migrated from Ta-li Fu. Pei-yin-shan is healthy all the year round (5,630 feet), and there are bamboo partridges in plenty.

What we saw of these Min-chias' way of life would be quite

enough to identify them as Shans, but fortunately the *Topography* is very clear on this subject. Under the heading of Pai-jên, *i.e.*, men of Pai[1] (white), it says: "Pai-jên formerly lived at Pai-ngai-chuan, in Ta-li Fu, and belong to the golden teeth Pai barbarian family, who belong to the Pei or Po stock. Afterwards they lived at Ching-tung Fu, and now are very widely distributed over Yünnan (mentions ten Departments). They are also called Min-chia. They are a branch of the ancient Pai nation." The *Topography* goes on to praise them for their intelligence and frugality, virtues for which they are still conspicuous. Further, when treating of a tribe called Na-ma, the *Topography* explains that Na-ma is the name by which the Mo-hsieh tribe (? Mishmee) know the Min-chia who belong to the P'o family.

A mile before Mo-lan-po we saw below us, on a lower slope of the mountain, aborigines, said to be Lolos, kneeling in fours and fives on the sward before an altar covered with offerings. They were said to be worshipping heaven on the occasion of the "little new year"; it was the eighteenth day of the twelfth month, probably the beginning of the new year celebrations, which occupy many days. The scene was perfectly still, without a house in view; the sun was setting from a purple sky behind thickly-wooded hills; a more impressive sight I never saw. Unfortunately, they were a good 800 feet below us, and there was not enough daylight to get to them and back to the inn.

The next day, the 23rd January, we descended again into the valley of the Yuan River, where a blue sky without a cloud, and a scorching sun, were reigning as on our previous passage. The monotony of the paddy fields and areca palms of the plain was broken by a party of the Shan women of the Hua-yao or "coloured waist" variety, as they are called by the Chinese, who looked like butterflies, so gay was their attire. They wore yellow or red petticoats to a little below the knee, with a bright-coloured sash running diagonally across the body; bonnets of blue cotton, and blue cotton leggings with bare feet. They had neat baskets attached to a waistband, and taking the place of a bustle.

At Hui-shih-ya, a wretched hamlet of five houses, there was only one room for us all to sleep in and for the cooking, which had to be done with pine branches, filling the room with smoke, there being no chimney. To add to our troubles, as I was sitting outside to escape the smoke, they came out to say that one of the coolies

[1] This character is probably employed for its sound merely; "P'o" or "Pei" and "Pa" are other names for Shans.

was dying, and that they wanted medicine. I found the man foaming at the mouth, with eyes set, undergoing a variety of treatments. My treatment was of a negative sort, for I could go no further than to feel the man's pulse and assure the company that he was not dead. The old woman of the house gave most satisfaction, for she said a long charm over the man, describing figures in the air with her hand. She then lit joss paper over him, and ran out of doors with it, repeating another charm as it burnt out on the hillside; she then returned, and said there was nothing to fear, as she had sent the devil away. Subsequently, whenever the man groaned, his comrades told him not to be afraid, as he was not going to die, and every two minutes some one shouted to him to ask him how he felt. The scene was made more weird by the flickering flame of slips of pine, our only light. At last the man became quiet, and we all went to sleep.

Pao-hsiu-kai to Shih-p'ing Chou. — Pao-hsiu-kai is a long straggling village lying along the north marge of a lake, apparently about 4 miles by 1. There are still many ruined houses, but the place is evidently recovering, for temples are being rebuilt, showing that there are people with money to spare. Eight miles over a level road of red clay brought us to Shih-p'ing Chou, situated near the west end of a large lake, called on maps I-lung Hu. About half way, at the village of Koa-p'o, some 200 yards to the south of the road, we observed, while having breakfast, a Lolo woman, from whom vocabulary No. 7 was obtained. Unfortunately, before I had gone very far with my list of words an old lady, passing, took alarm, and called her away. The Lolos are said to be much the largest element in the country population here.

At Hsin-kai-tzŭ, a market town at the east end of the lake, it happened to be market-day. There were square-built men with broad faces, regular features, and open expression, wearing a profusion of tunics or loose waistcoats, one over the other, each tunic adorned by a line of brass buttons, the size of a shilling, down the front, and so close that some men must have had several pounds of brass to carry about. They all carried knives or short swords. One was carrying a foreign muzzle-loading rifle, to the horror of my Ssŭ-ch'uan men. There were women in their clan dress, both Lolo and Shan. The unmarried Lolo women have a point projecting from their head-gear over the forehead almost reaching the bridge of the nose. There were several new costumes, of which— in the universal hubbub, intensified by a difference of opinion with

the coolies as to whether we were to go on that day—I failed to get any account.

Chi-kai to Mêng-tzu Hsien.—We passed only one village, Yeh-ko-p'u by name, inhabited by Lolos, called by the Chinese Han Lolo, *i.e.*, Chinese Lolos, in distinction to Hill Lolos, who are more independent. However, an old villager told me that they rarely intermarried with Chinese. They spoke among themselves in Lolo, exactly agreeing with vocabulary No. 7. They form almost the whole country population in this part. The old man told me that almost all their "pĕr-ma" (sorcerers) had been killed at the time of the rebellion, and that there were none now within easy reach of the village.

Ch'ias-t'on to Yang-lan-ch'ung.—In all the villages within reach of wood there was a 12-foot fir tree (without roots) planted in front of each door, making an avenue of the road—a New Year's custom. Another New Year's institution with these aborigines is an immense see-saw, *i.e.*, a pole 25 feet long pivoted to revolve freely on an upright 5 feet high. Two men mount the machine, one at each end, throwing arms and chest over the pole and then they revolve somewhat as in a giant-stride, one man shoving off from the ground, while the other is high in the air. Some of the children performed very prettily. At So-shao-pa, while our coolies were horse-playing with this machine, I had the good luck to find a new aboriginal, a Tu-la, whose Vocabulary, No. 8, shows his tribe to belong to the Lolo family.

(To be continued.)

REVIEW.

HISTORY OF PROSE FICTION. By J. C. DUNLOP; revised by HENRY WILSON. 2 vols. (Bell.)

A NEW edition of Dunlop's *History of Fiction* was badly wanted. With all its faults, the book fills a place which is not occupied by any other book. No single man nowadays would have the courage to review the whole field of romantic fiction as Dunlop does with such a *cœur léger*. His faults were, after all, faults of his age: such a thing as the affiliation of texts was unthought of at his time. Of course there are innumerable omissions: he had practically no *Vorarbeiten* to work with. But faults of omission are the most venial of sins. Dunlop's work was thorough work so far as it goes, and that is as high a standard as any one can well aim at. True, he does not go very far or deep. But the work he did do—analysis of the plots of the best-known prose romances—is necessary work, and need not be done, if done well, more than once. It is sufficient testimony of the soundness of Dunlop's performance in this direction that Liebrecht thought it worthy of translation, and that no other German has thought it possible to supplant Liebrecht's Dunlop.

The ideal reconstruction of Dunlop would be one in which the later portions of the book, dealing with modern fiction, should be excised, and the lacunæ of the book filled up by analyses and abstracts of the many mediæval novels and romances not touched by Dunlop. It would be practically impossible to make him complete on the question of affiliation; any complete bibliography would take up space almost equal to the original work. Mr. Wilson, the editor of Dunlop for "Bohn's Series", has decided in an opposite sense on all these four points of principle. So far from omitting the passages on modern fiction, he has added elaborate appendices on novel-writing in Germany, Scandinavia, and Russia. These summaries are well done so far as they go, but they naturally cannot go very far, and are incongruous with the main topic of the book. Romance is fiction of incident, the novel is character fiction; any attempt to deal with them on the same lines cannot fail to be incongruous. Again, Mr. Wilson has not added appreciably to

the romances analysed by Dunlop, and the book is thus incomplete in many sections. Mr. Wilson has also attempted the huge task of giving a bibliography of the stories mentioned by Dunlop. It must be confessed that he has succeeded to a much greater extent than could have been anticipated, considering the great difficulties of the task. He is not complete ; no bibliographer ever was. The book has evidently taken many years going through the press, and the earlier portions are accordingly often lacking in notices of recent articles, editions, and parallels. But what has been done will be of great utility to the many students who interest themselves in the fascinating study of the literary migration of tales. In particular, the more elaborate notes at the end of vol. i deserve much praise for the industry and judgment which they display.

The account of Russian parallels (chiefly from Vesselovsky) will be especially welcome. Thus, the theory of Vesselovsky which refers the legend of Merlin to the Oriental traditions about Solomon and Marcolf, will be new to most students of the Arthurian legends. A couple of tables at the end of the first volume give Landau's genealogy of the Bidpai literature and Hahn's Aryan Exposure and Return formula. It is unfortunate that Mr. Wilson was not acquainted with Mr. Nutt's additions to Hahn from Celtic sources, and it would have been well if he had completed Landau's table with Mr. Keith-Faulkner's materials, as I have attempted to do in the table appended to my edition of North's version of Bidpai's tables ; this has 128 entries against Landau's 50. A further extension of the use of tables might have been applied to the genealogy of the mythical heroes of each cycle, so as to bring out their relationship.

Altogether Mr. Wilson has erred, if error it be, in giving us more than we had a right to expect, and that is a fault leaning perceptibly to virtue's side. He has given us a Dunlop with many of the modern improvements, and for that we should be grateful to him. At times these improvements are inserted in the text with somewhat incongruous results. In one case he has entirely rewritten Dunlop, whose views on the Graal legend could scarcely be reproduced in their crude form. It was unlucky for Mr. Wilson that Mr. Nutt's treatment of the subject did not appear in time for him to correct Dunlop according to the newest and the brightest lights. A similar piece of ill-luck has deprived him of Mr. Andrew Lang's guidance in his treatment of Cupid and Psyche.

It is inevitable that a review of a performance of this kind should deal rather with defects which a critic imagines he detects

than with merits which he is too apt to take for granted. I should like, therefore, to give emphasis to my admiration for the general high level of the work which Mr. Wilson has done and the industry which is displayed on every page. The incorporation of Liebrecht's notes, the index of names at the end of the first volume, and the general index at the end of the second, make the new Dunlop equal to the German translation which hitherto even English students of folk-lore were tempted to refer to. And the copious references to variants, many of which appear to be original discoveries of the new editor, make the Dunlop of Bohn's Series superior to the "Dunlop-Liebrecht" which we have hitherto been accustomed to use. Altogether Mr. Wilson has succeeded in making his edition of Dunlop part of the indispensable apparatus of the folk-lore student. Till Dunlop is taken in hand by a company of experts—and he fully deserves the honour—Mr. Wilson's edition will "hold the field".

JOSEPH JACOBS.

CORRESPONDENCE.

ROMAN REMAINS IN YORKSHIRE.

In Mr. Price's valuable notes, under "Filey", reference is made to Mr. Roach Smith's *Retrospections, Social and Archæological*, vol. ii, p. 77. I found, on turning to the page indicated, that Mr. Smith there gives an abstract of a paper by Dr. W. S. Cortis, on "Discoveries at Carnesse", near Filey. After some trouble and inquiry, I learned that this paper is printed in the "Twenty-sixth Report of the Scarborough Philosophical Society", an octavo pamphlet of twenty-seven pages, printed in 1858. The present Secretary of this Society has kindly given me a copy. Few archæologists, I imagine, know of the existence of the Scarborough Society, and still fewer are aware that one at least of its reports contains a most important and valuable paper. Except a few fanciful etymologies, the contents of Dr. Cortis's paper are of very great value, and deserve to be much better known than they are. For this reason I thought it worth while to make this addition to Mr. Price's notes, especially as Mr. Roach Smith omits to say where Dr. Cortis's paper may be found.

J. R. Boyle.

ROMAN REMAINS AT SCARBOROUGH AND CHICHESTER.

In the January number of the *A. R.* (vol. ii, p. 390) Scarborough is put down as a place where Roman remains have been found, on the authority of a paragraph in the *Gentleman's Magazine* for 1844 (ii, 636). There is, so far as I can see, no proof whatsoever that the urns alluded to in that paragraph are Roman, and I am not aware that any Roman remains have ever "turned up" in Scarborough. Quite recently some foundations and pottery were found on the Castle hill, in levelling some grass, but I believe these are undoubtedly mediæval. Roman remains have, however, been found at one or two points on the east coast of Yorkshire. There may have been some kind of fort at Filey, which offers the nearest approach to a natural harbour of any place on the coast. At Ravenhill, near Robin Hood's Bay, there was discovered in 1774 a most curious inscription (*C. I. L.*, vii, 268), which ought to have been mentioned on p. 339. Otherwise, few Roman remains have been found on the east coast in the whole distance from South Shields to Brancaster.

I may take this opportunity of protesting against the approval accorded on p. 333, to the views of Mr. H. C. Coote on the Centuriation of Britain, although, as Hübner says (*C. I. L.*, vii, p. 5), *vix est quod accuratius refutetur*.

I may also here add a correction to my paper on *Roman Sussex* (i, p. 436).

I there catalogued *C. I. L.*, vii, 14, as different from an inscription given by Mr. Watkin in the *Archæological Journal* (xliii, 286). I have since seen the stone, and I find that Mr. Watkin's reading is quite wrong, and the two inscriptions identical. F. HAVERFIELD.

FOUNDATION SACRIFICE.

[*Ante*, vol. ii, p. 380.]

MR. HARTLAND'S valuable suggestion that we should be on the look-out for evidence of foundation sacrifice in connection with excavations into pre-historic monuments has special interest for me, and I have noted one instance. In taking up the stones of a circle in the parish of Creich, Fifeshire, "underneath one of the sculptured stones were found small burnt bones and charcoal. The late Dr. Smith, a surgeon in the parish who examined the bones, said that they were *human bones*" (*Proceedings of Society of Antiquaries of Scotland*, vii, 403). I may perhaps be allowed to refer to my *Folk-lore Relics of Early Village Life* for a discussion of this important subject. G. L. GOMME.

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RECENT ARCHÆOLOGICAL RESEARCH.

NO. II.—FOLK-LORE.

Folk-Lore Journal. Vols. ii-vi, and Jan.-March 1889.

Greek Folk-Songs from the Ottoman Provinces of Northern Hellas, edited, with Essays on the Survival of Paganism and the Science of Folk-Lore, by J. Stuart Glennie. 1888.

Die griechischen Culte und Mythen in ihren Beziehungen zu den orientalischen Religion, von O. Gruppe. Vol. i, 1887.

Lehrbuch der Religionsgeschichte, von P. D. Chantepie de la Saussaye. 1887.

DURING the last five years folk-lorists, in this country at least, have been largely occupied in the endeavour to define the scope and nature of their study, and in framing methods of work by means of which the results of research may be more readily co-ordinated than has hitherto been the case. Reference to the discussion of the former point will be found in the note below[1]; the latter has been worked out chiefly by the Folk-Lore committee of the Folk-Lore Society, and by the committee charged with the preparation of a *Handbook to the Science of Folk-Lore*, and as the result of their labours an appeal has been made by the Council of the Society to all students of folk-lore to assist in the reclassification of folk-lore facts upon a basis laid down in the last report.[2]

It might be thought that there is little to do in a study in

[1] *Folk-Lore Journal*, vol. ii, pp. 285-86, G. L. Gomme; pp. 311-15, A. Nutt; pp. 340-48, E. S. Hartland, C. S. Wake, H. B. Wheatley, G. L. Gomme. Vol. iii, pp. 1-16, G. L. Gomme; pp. 97-103, Charlotte S. Burne; pp. 104-15, Ant. Machado y Alvarez; pp. 115-21, E. S. Hartland; pp. 267-69, Charlotte S. Burne. Vol. iv, pp. 75-79, J. Stuart Glennie; pp. 158-63, Charlotte S. Burne: pp. 193-212, R. C. Temple; pp. 213-21, J. Stuart Glennie. Mr. Stuart Glennie's articles are reproduced, with corrections and additions, in the book mentioned at the head of this article. His "triadical" classification of folk-lore is beyond doubt the most ingenious and philosophical yet propounded.

[2] *Folk-Lore Journal*, January-March 1889.

which so much time and thought are spent upon definition. As a matter of fact, however, the long discussion has had a most fruitful influence upon the course of research ; some of the best recent folk-lore work owes substance and idea to what at first seemed a purely academic discussion. Moreover, questions of terminology were soon found to involve the very essence of the study, and the result of their consideration has brought to many a clearer view of what folk-lore really is, and of the relation in which the problems which confront the folk-lorist as such, stand to the great problems which meet all inquirers into the past history of man.

At the outset, grave difference of opinion showed itself between those who consider the chief object of folk-lore to be the reconstruction of particular chapters in the past history of the race, and those who regard it as the study of certain psychical phenomena of man in a particular stage of culture without special reference to its bearing upon the question of his origin or the story of his earliest growth. In a word, was folk-lore to be ethnological or archæological? Are the customs of Narrinyeri or Cahrocs folk-lore in the sense that the superstitions of Dorsetshire hinds are? Folk-lore, says Mr. Stuart Glennie, is "the lore of the folk about their own folk-life in its various expressions in customs, in sayings, and in poesies." But what is the *folk?* Early in the discussion, I proposed to equate the term with that of "primitive man", and defined the adjective as connoting "not absolutely the first stage of culture, but an essentially low one, the dominant characteristic of which is that in it all knowledge is at once empirical and traditional." By *folk* Mr. Stuart Glennie means people "unaffected by culture, whether relatively, like the uncultured classes of a civilised state, or absolutely, like savages, unvisited as yet by missionaries." If either definition be adopted, the question asked above must be answered in the affirmative, and as a matter of fact all periodicals or works devoted to folk-lore are largely concerned with the beliefs and practices of savage races. Mr. Gomme at first stood almost alone in his protest that the lore of the uncultivated classes of a civilised state must not be treated in the same way as the lore of the absolutely uncultured savage, and that it is well to restrict the term folk-lore to the former, and to define it as the "scientific study of the survivals of archaic beliefs, customs, and traditions in modern times". Whilst recognising to the full the value of modern savage life and thought as a means of illustrating and interpreting the survivals found among the cultured races, his chief interest in the latter lies in

their enabling us to rescue from the past certain phases in the life-history of those races which we could not recover by any other form of archæological research.

As far as mere definition is concerned, Mr. Gomme has won over many of his opponents, and a quasi-official sanction will be given to his view of the study by the handbook now in course of compilation.[1] Practically, however, folk-lore, as the study of fragmentary survivals among certain races of systems of belief and fancy discarded by those races as a whole, continues to go hand in hand with the study of similar systems among races who have as yet not reached forward to any higher religious, scientific, and social conceptions than are involved in such systems. There is the best of reasons for this; as a rule, the archæological and the ethnological folk-lorist both start with the same assumption, namely, that the belief and fancy of the relatively uncultured European peasant are substantially of the same essence as those of the absolutely uncultured savage, and that observations made in the one case may profitably be used to supplement and to control observations made in the other case. It is further tacitly assumed that the conceptions and practices of races in a very low stage of culture are likely to afford the most faithful view of the conceptions and practices of the earliest races of mankind; furthermore, that among those races which have attained a higher level of culture, it is the least educated classes which cling longest to the earlier beliefs and customs.

Without claiming that these assumptions are universally held, I think they may fairly be described as the orthodox doctrine of folk-lorists at the present day. Folk-lore has in fact followed the lead of anthropological science at large. Different stages in human culture have been distinguished by the complexity and elaboration of the material arts and appliances, and no anthropologist entertains the shadow of a doubt that the stone age represents an absolutely earlier period of culture than the bronze or iron age. No anthropologist hesitates, when investigating the lake dwellings of Switzerland or the kitchen middens of Denmark, to turn for parallels to Borneo or Greenland. In the January number of this *Review*, Mr. Arthur Evans supplies an admirable example of this method in his discussion of the date and meaning of Stonehenge;

[1] This handbook is intended primarily to serve the needs of collectors, especially of those who are not trained folk-lorists. Much of the arrangement is therefore purely empirical. Mr. Stuart Glennie criticises the plan of the handbook with much vigour from a scientific stand-point. (*Greek Folk-Songs*, p. 264 *et seq.*)

he seeks a clue to the mystery among practices still prevalent in India and in the Caucasus. In the same way the student of the obscure and fragmentary beliefs of the European peasantry seeks light from the creed and ritual of Redskin or Negro.

This "orthodox" doctrine, as I have called it, is indeed so prevalent and so firmly established, that it is matter of surprise to see within what a short period it has won acceptance. In one sense it is no new thing. Mr. Lang has reminded us that it is but a return to methods not obscurely shadowed forth by Eusebius, and clearly laid down by Fontenelle. But it forms a great departure from the principles which animated the writers on folk-lore early in this century, and in accordance with which, barely twenty years ago, nearly every work on the subject was composed. The great impulse to folk-lore research came, in fact, from the new and fascinating study of comparative mythology, and that again was an offshoot from comparative philology. By a pregnant accident the great founders of comparative folk-lore, the brothers Grimm, were also well-nigh the most illustrious among that illustrious band of workers to whom we owe the modern science of language, the main achievement of which has been to establish the unity and homogeneity of the Aryan speeches. The most eminent of those who trod in the footsteps of Jacob and Wilhelm Grimm—Max Müller, Adalbert Kühn, Michel Bréal—were philologists first and then mythologists. Small wonder if the study of myths followed the same lines as that of the study of words, and if the theory of a common Aryan myth-fund was accepted as equally demonstrable with the theory of a common Aryan word-fund. Moreover, nearly all the folk-lore facts brought together by the Grimms and their disciples were collected from races of Aryan speech. It was almost inevitable that the marked uniformity of mythic belief and practice thus shown to exist among the Aryan peoples should be considered to be of the same nature as the similarity of language. In this way arose the theory of a pan-Aryan pro-ethnic mythology of which the folk-lore of modern Europe was in the main the last faded remnant. For it must be noticed that most of the interest felt in folk-lore lay in its assumed relation to the hypothetical mythical systems of our Aryan ancestors. There runs, moreover, throughout most works on folk-lore written during this period (say from 1830-70) the assumption that the mythologies of India, of Hellas, and of Scandinavia, as we find them embodied in the Vedas, in the Greek mythologic poems, and in the Eddas, are a fixed standard, so to say, from which the current popular belief, when analogous to them in

any respect, represents a departure.[1] Mr. Kelly's *Curiosities of Indo-European Folk-lore* may be cited as an excellent popular example of this method of treatment. Folk-lore is illustrated within the limits of an assumed racial unity, and in connection with what may be called the official mythologies of the races composing that unity.

Different causes led to the discredit into which this system of interpreting the facts of mythology and of folk-lore has fallen. Mannhardt's researches, begun in the fifties, at first almost ignored, and only of late years appreciated at their real value,[2] demonstrated the importance of many rustic rites and beliefs which could not be referred to any of the conceptions embodied in the official mythologies of antiquity, and may be said to have recreated for us the rustic mythology of our race. On the other hand, the immense mass of testimony collected with such unwearied discrimination, and marshalled in such convincing order by Professor Tylor, established beyond doubt the substantial unity of mythic conception and rite among all the races of mankind, and afforded at the same time a reasonable and cogent explanation of facts so remote from our civilised consciousness. The older synthesis did not, however, yield ground at once. The transition stage may be observed in such a work as Mr. John Fiske's *Myths and Myth Makers* (1873). The theory of Aryan speech and myth unity still prevails with all its consequences, but Mr. Tylor's views are too prominent to be ignored, and an ingenious compromise is essayed. Languages, we are told, not phonetically akin, may yet present points of contact due to the presence of words which directly imitate natural sounds. If Greek and Cherokee had the same word for thunder, that fact would not justify one in asserting the relationship of these two tongues. In the same way, the presence of similar myths in the religious systems of two races need not imply mythological kinship if such myths are a simple reflex of natural phenomena. Mr. Fiske admits what may be called onomatopoetic myth—similarity between the Aryan and non-Aryan races,

[1] The work of Jacob Grimm, which is invariably adequate so far as his means of information extended, is in no way alluded to in this paragraph ; nor do I wish to be understood as in any way depreciating the labours of the first and second generation of folk-lorists. The great majority of their results are perfectly sound, and their researches into Aryan folk-lore only require adapting to our more extended knowledge to be, for the most part, as valid to-day as when first published.

[2] *Germanische Mythen*, 1858 ; *Roggenwolf und Roggenhund*, 1866 ; *Die Korndämonen*, 1868 ; *Wald- und Feld Kulte*, 1875-7.

but he denies any such unity of belief and practice as would be analogous to the phonetic kinship of the Aryan languages.

In Mr. Fiske's own book, instances enough were given to controvert the validity of this compromise between views which as yet were hardly felt to be rival, and the progress of research was soon to disprove it entirely. Facts accumulated with marvellous rapidity in favour of Mr. Tylor's views, and such facts came not only from Polynesia and Greenland, from China and Zululand, but also from the well-nigh prehistoric past of Egypt and Babylonia. In the conflict of theories which has filled the last two decades, the study of folk-lore, in this country at least, has followed rather than led the way. It was on the ground of comparative mythology that the anthropological school offered battle, and won the victory, if general acceptance be a test of victory. The influence of Mr. Lang has in England been more fruitful than that of Mannhardt.

Indeed, the history of our study of late is very largely that of Mr. Lang's researches, of the influence they have exercised, of the comment and opposition they have called forth. When the Folk-Lore Society elected him to its presidential chair last year, every genuine folk-lorist recognised the election as at once an act of justice and a manifesto; the present generation of students had put their master in his rightful place. Mr. Lang was the first to bring the facts of savage mythology to bear upon that theory which resolved the god and hero tales of the various Aryan tribes into a series of nature-myths, all of which had apparently assumed shape at the selfsame stage of mythological and linguistic growth. His criticism was so trenchant and convincing that it won immediate and widespread assent. Had it been simply negative, it would, however brilliant, have remained comparatively fruitless. But along with the searching comparison which left no race outside its survey, with Mannhardt's sympathy for the neglected and rustic sides of mythology, with Professor Tylor's divinatory grasp of the psychological attitude of uncultured man, Mr. Lang displayed that interest in, and that feeling for the growth and nature of cult and institution which is one of the most marked features of the modern historical spirit. He thus attracted the support of many students of the classical mythologies who had found the Aryan nature-myth system too *doctrinaire* in its methods and too capricious in its results, and had turned to the ritual side of religion, as affording a surer basis for investigation. Whatever opinion be held by the few surviving supporters of what may be briefly termed the Aryan hypothesis, it is certain that

the great majority of students have accepted the rival theory that the mythical systems of the Aryan races are simply differentiations of conceptions and practices common to all mankind, and that they do not form an independent and separate unity, as is the case with the Aryan speeches.[1]

The effect upon folk-lore research was not slow to make itself felt; the mythic lore of savage races became an integral part of the study, and almost every recent monograph is as much concerned with the mythic conceptions of non-Aryan as of Aryan races, and treats the one class of material as essentially the same as the other. The tendency which has recently led the student of mythology to ritual rather than to legend is equally manifest among folk-lorists. It is significant that the work which most clearly sums up the aims and methods of the modern school is entitled *Custom and Myth*, and that throughout more stress is laid upon the former than upon the latter element. Mr. Gomme's influence and example have also had much weight in determining the direction of recent research. In his works, *Primitive Folkmoots* (1880) and *Relics of Early Village Life* (1883), he showed to what use the student of legal and social institutions could put the heterogeneous mass of facts usually classed together as folk-lore.

The folk-lorist of to-day may thus be described as chiefly interested in the facts, the *Realien*, to use a German word for which we have no precise English equivalent, of popular tradition, and as using them in the same way as the geologist uses fossils, or as the archæologist (in the limited sense commonly attached to the word) uses the material remains of man's art and craft in order to determine the age and sequence of culture strata. And the guiding principle, at least of the majority, is that the occurrence of forms among uncultured races which present analogies to survivals among the cultured races, is evidence that the latter were once in a psychical and social condition similar to that of the former.

In at least one branch, however, of folk-lore studies, that which investigates the origin and diffusion of popular tales, a guiding principle is largely accepted, diametrically opposed in its nature to the principles which have been just set forth. This is the "borrowing-theory". It assumes that the myths, legends,

[1] The acceptance of this theory by no means pledges its holder to the rejection of the naturalistic interpretation of myths advocated by the "Aryan" school. It is possible to assent to nearly every interpretation proposed by Professor Max Müller or by Sir George Cox, whilst dissenting entirely from their account of the origin and mode of operation of the mythopoeic faculty.

ritual and legal customs, and traditions which form the subject-matter of the studies both of comparative mythology and of folk-lore, are to be regarded not as the fossil remains by which the sequence of strata in the mental and social evolution of mankind can be determined, but as the distorted and degraded fragments of religious and social systems with which we are familiar at first hand. It postulates that the phenomena under consideration existed in an original and perfect shape in some definite centre, whence they were diffused, suffering change in the process. In the application of this principle, folk-lorists have not followed the lead of the mythologists, they have rather shown them the way. In the study of folk-tales, the borrowing-theory has never lacked adherents since the publication of Benfey's *Pantschatantra*, the overwhelming erudition of which gave the theory standing and authority. The two scholars who chiefly carry on Benfey's method, Mons. Em. Cosquin, the editor of the *Contes Loviains*, in France, and Mr. W. A. Clouston in England, are worthy representatives of their master as regards the width and painstaking nature of their labours. By confining their advocacy of the theory to certain sides of comparative "storyology" they are enabled to make a show of rigorous deduction which creates a favourable impression in comparison with the apparent vagueness and looseness of method inherent to every attempt to deal with the folk-tale problem under all its aspects.

Within late years the borrowing-theory has been eagerly applied to the investigation of the classic mythologies, and has contributed, in common with the onslaught of the anthropologists, to the overthrow of the Aryan nature-myth scheme of interpretation. In opposition to what may be called the "evolutionist" theory, summed up on page 79, I have styled the rival borrowing-theory "revelationist", no theological connotation being of course intended. It is amusing to notice that on the battle-field of Hellenic mythology the advocates of the anthropological and of the Aryan systems of myth-interpretation—both of whom are, or should be, if they were logical, evolutionists—have, in their anxiety to make points against the rival theory, borrowed weapons from the revelationist armoury. The "Aryans" have been perhaps the greatest sinners in this respect; Sir George Cox, for instance, whose whole position rests upon the parallel development within the race-limit of Aryan speech- and myth-forms, seems to be of opinion that the asserted direct influence of Oriental upon Greek religion is in some way an argument against Mr. Lang's contention

that the latter is made up of elements common to every human race. To an unprejudiced observer the only ground for this opinion would seem to be the fact that the modern systematisers of Semitic and Egyptian mythology have worked upon the same artificial and *doctrinaire* lines as the Aryan school, without having the linguistic and historical justification which the latter had. Be this as it may, there can be no doubt as to the progress which revelationist principles have made in the investigation of Hellenic religion. One instance must suffice. Professor Ramsay, reviewing the latest edition of Preller's *Griechische Mythologie* (*Class. Rev.*, vol. ii, p. 287), emphasises the fact that the new editor has definitely discarded the theory of an Hellenic origin for Aphrodite. The foam-born goddess of desire is entirely a Semitic importation. It only remains to carry the process a little further, and to treat the Norse Freya, and perhaps the Celtic Branwen, as derivatives of Aphrodite, to obtain an idea how religions have been developed in accordance with revelationist doctrines.[1]

It is in all cases an advantage to have the whole evidence in favour of an hypothesis set forth by a master's hand. This has recently been done for the revelationist theory by Professor O. Gruppe in the great work mentioned at the head of this article. In spite of Professor Max Müller's allusion to this work,[2] in spite of the extraordinarily brilliant and able review which Mr. Jevons gave it in the pages of the *Classical Review* (Jan. 1888), it has, strangely enough, attracted but little notice as yet in England. I say strangely enough, as in this country, if anywhere, Professor Gruppe's conclusions should command eager assent. The author, in his Prolegomena to an exhaustive comparison of the Greek and Oriental religious systems, passes in review the labours of all previous investigators in this field of inquiry. This survey, which extends to nearly 300 pages, is in itself sufficient to render the work indispensable to every serious student of the subject. But it is his conclusion which interests us the most. After examining the hypotheses which propose to account for the similarities observed in the religious systems of mankind, and in especial of antiquity, he rejects them all ; the kinship of these systems is too close to admit of any other explanation than that of common derivation

[1] As far as Hellenic mythology is concerned, I incline to think that the high-water mark of this doctrine has been reached. Mr. L. R. Farnell's article on "The Origin of Greek Sculpture" (*ante*, vol. ii, pp. 167-84) may be regarded as a significant note of protest.

[2] Inaugural Gifford Lecture, p. 23.

from a definite centre within historical times. This conclusion, which in its final outcome so strikingly recalls those of Bryant and Faber, is supported with immense erudition, great ingenuity, and an entire absence of theological prepossession that ought to make the book an arsenal for orthodox apologists. These will doubtless discover its existence when its conclusions have been disproved, and when the progress of research has made its stand-point antiquated. Then we may expect to see it quoted by "orthodoxy" as the last word of science against the fanciful theorists of the day.

This opposition of evolutionism and revelationism seems to me the most important question which lies before every investigator into the origin and development of the psychical and social expressions of man's individuality. It further seems to me that the answer to this question must be determined to as large, if not to a larger, extent by the rightful appreciation of the facts of folk-life, as by any other method of research, whether psychological, historical (using that word in a restricted sense as the study of written records), or archæological (using that word in a restricted sense as the study of the material products of man's art and craft). In comparing the studies of comparative mythology and folk-lore I formerly used these words: "The facts are essentially the same in both cases, but the one study deals with them at one, the other at another stage. It is when they have become at once rigid and systematised by passing through the hands of an hierarchical class, yet capable of development by falling under the artistic influence of the craftsman and the philosophic influence of the thinker, that comparative mythology has to do with them; before then they are but a portion of folk-belief."[1] If I may be allowed the criticism on Professor Gruppe's work, he impresses me as having directed his attention too exclusively to the more advanced stage of religious consciousness, and thus to have exaggerated to himself the similarity, and to have misconceived the essential nature of the phenomena.

The impression that in the domain of rustic custom and myth, rather than of the official religious systems of the ancient world, the battle of evolutionism *versus* revelationism may best be fought out, is strengthened by finding that the borrowing-theory has only been applied to one form of folk-expression, tales, and with any measure of success to but one section of folk-tales. We are told that the stories of India spread throughout Europe through the medium of the returning crusaders, of the Mongol invasions, of Jewish traders, and of monkish homilists. We are not told if hop-

[1] *Folk-Lore Journal*, ii, p. 312.

scotch and alley-taws were propagated by the same means. Yet any general theory of folk-lore must take account of children's games, of folk-leechcraft and weather-wisdom, of saws and counting-out-rhymes, of local fairy traditions (which so often re-echo each other from the Ural to the Shannon), as well as of the nursery tales and legends, which have hitherto attracted the lion's share of study. Many of the arguments, moreover, of the borrowing-theorists, whilst perfectly valid against the hypothesis that our European folk-tales are the detritus of a pan-Aryan pro-ethnic mythology, lose all force when directed against the evolutionist theory as expounded by Mr. Tylor, Mr. Lang, and their followers. Mons. Cosquin, noting the likeness which obtains throughout the entire *märchen-corpus* of Aryan races, asks if the ancestors of those races carried a set of the *Bibliothèque de Fées* with them when they set out on their wanderings from their primeval home, whether in Southern Scandinavia or in Central Asia. But if we assume that the Aryan invaders found tales among the peoples they conquered and enslaved, just as at the present day we find tales among the Hottentot and Ojibeway, among Samoyed and Maori, the gibe is pointless. On this assumption the folk-tales of the Aryan-speaking races are richer in incident, more dramatic in texture, higher in ethical feeling, more full of pathos and humour, than are those of modern savages, for the same reason that the mythologies of Hellas and Scandinavia are superior to those of Vancouver's Island or Micromesia, namely, that they have been fashioned and transmitted to us by the most gifted of all the human races. The raw material is the same everywhere; but the Aryan weaver has been more skilful than any of the others.

As a rule, the revelationists have contented themselves with endeavouring to occupy this or that small section of the battle-field, and have not attempted a systematic application of this principle to all the facts of folk-lore. The most ambitious among them is certainly the Rev. Dr. Gaster. In an article on the "Modern Origin of Fairy Tales"[1] he sees in them the last and modern development of folk-lore, the only ancient element in which is the plot; whilst the incidents, especially those of a supernatural kind, "represent the residuum of the knowledge acquired by the upper classes, and which in time penetrates into the lower regions of society and imbues it with some vague outlines of real knowledge." Thus the whole fairy belief and fairy worship are attributed to the tenth, eleventh, and following centuries, and it is claimed

[1] *Folk-Lore Journal*, vol. v, p. 339 *seq.*

that both can "easily be traced back to their Oriental and Christian sources". It is true that Dr. Gaster warns us that his contention applies only to fairy tales, and not to superstitions and to other parts of folk-lore. But it is hard to see why a fact embodied in superstition or practice, in a local custom or in a child's game, should be treated differently when it forms an incident in a fairy tale. Dr. Gaster also warns us against applying one theory to explain all the elements of folk-lore. The warning is a sound one, but is little wanted as a rule by the anthropological evolutionist. He is perfectly willing to admit that among the numberless forms of folk-expression, elements of recent and verifiable origin are to be found side by side with elements of the hoariest antiquity, and that no one of the many theories of folk-lore but can claim with perfect truth certain phenomena in its favour. None the less is it true that the lore of the "folk" does differ profoundly from that of the cultured classes, and that in describing the essence and in essaying to trace the history of that lore, we are compelled to have recourse in the main to one or other of the rival theories which I have termed evolutionist and revelationist. How profound the difference is, and what far-reaching historical consequences may be drawn from it, are well exemplified in Mr. Stuart Glennie's essay on the "Survival of Paganism". He distinguishes three general characteristics of Western Paganism, whether as it flourished before or as it has survived since the destruction of its sanctuaries, which differentiate it from those conceptions of historical Christianity which underlie to such a large extent the metaphysical, ethical, and social ideas of modern civilisation. These are: (1) a profound feeling of oneness with nature and a mythic personalising of its phenomena, inanimate as well as animate; (2) unconsciousness of sin in sexual love and non-belief in a supernatural state of rewards and punishments; and (3) a profound feeling of family kinship and patriotic devotion to the Fatherland. He shows how the Greek folk-songs embody these characteristics, and how little the Greek folk-life has been affected in any important particulars by the Christianity which for nearly two thousand years has been the official religion of the race. "Prostrate", he says, "may be the gods of the poets—never to the deities of the people have their sacrifices failed." And this is, in fact, what the folk-lorist of to-day means to imply when he parallels some peasant rite or charm by instances from Mexico or New Guinea; he sees in both cases examples of sacrifices to deities who are older than any recorded in the Vedas or on Akkadian

tablets, to those deities of the people who served as the stuff out of which priest and poet or thinker fashioned Zeus and Indra, Woden and Osiris, Izdubar and Lug, and who still receive much the same worship as they did in days before men looked with awe upon Olympus, or put up prayers and offerings to Agni.

Although the majority of folk-lore students at the present day are, as already stated, more or less pronounced evolutionists, it cannot be said that the evolution theory is more than a very plausible working hypothesis. With the exception of the work done by Mons. Cosquin, Mr. Clouston, and Dr. Gaster, nearly every recent monograph has been on frankly evolutionist principles. As instances of this method applied to the *märchen* problem, Mr. Lang's introduction to *Cupid and Psyche* and Mr. J. G. Frazer's monograph on the *Language of Animals* (*ante*, vol. i, Nos. 2-4) must suffice; whilst Mr. Frazer in his study of Totemism, Professor Karl Pearson in his investigations into the matriarchalism of the ancient Germans, and Mr. Gomme in his studies on the origin of local institutions, have shown how the facts of folk-lore, when interpreted in the light of the evolution theory, may affect problems with which at first sight they have nothing in common. But folk-lore research has been greatly hampered by the fact that so much of the earlier collections was made in view of a different theory, and that there has been no recoordination of facts in accordance with our widened point of view. Hence the cry for improved methods of classification. To effect this co-ordination is the object of the latest measures adopted by the Folk-Lore Society, measures which bear chiefly upon the two great sections of tales and customs. With regard to the former, the mass of material is enormous, beyond any one man's strength to master and analyse. It is therefore proposed to abstract existing collections upon a uniform plan, and in such a way that the material, reduced to manageable compass, may be conveniently analysed by a committee of experts. Volunteers for this work of tabulation are sadly needed; some readers, it may be hoped, of this article may feel impelled to write to the director of the Society, and to ask for tabulation forms. A brief abstract of the scheme devised by Mr. Gomme will best indicate what the Society proposes doing for customs. The custom chosen to illustrate the method of analysis is that of the "Ever-burning fire in the homestead". As British type-forms, the fire of the Bruighfer, of St. Bridget as reported by Giraldus, the Isle of Man custom, the Clavie custom in Morayshire, and bonfire customs in Perthshire and North Wales,

are quoted ; variants being given from Dyer's *Popular Customs* and from Wilde's *Irish Popular Superstitions;* the geographical distribution is then noted, as also the dates of the observations arranged chronologically. Parallels are then given, firstly from civilised countries outside Great Britain, then from savage or barbarous tribes, finally the leading incidents are tabulated alphabetically.[1]

The labour implied in the reclassification of folk-lore upon these lines is, it will be apparent, gigantic. The Society has issued an urgent appeal for assistance to all students, and it is to be hoped that it may be enabled to carry out its programme fully and in the immediate future. Such a body of tabulation and analysis, together with the admirable tables of descriptive sociology compiled under Mr. Herbert Spencer's direction, would throw light upon hundreds of forms to which we are at present unable to assign their rightful place in the history of human development. The task of archæological folk-lore is not unlike that of geology : we can only determine the sequence of our culture-strata by rigorously determining the area of distribution, the frequency of occurrence, the permanency or variability of culture-fossils. A method not less exact than in other branches of archæological science will suffice. The excavator who simply described the fragments of pottery or the human remains he brought to light, and who did not note the depth at which the objects were found, their position, the thickness and succession of the layers, and other similar details, would be justly blamed. As far as is possible, considering the ever-shifting nature of the subject-matter, the same fulness and precision of statement that are exacted from the measurer of megalithic monuments, from the opener of barrows, from the student of statuary or pottery or metal-work, must be exacted from the folk-lorist. It may be objected that it is impossible to study products of man's fancy and reason in the same way as products of his handiwork, and that it is misleading to group the two studies under the common designation of archæology. As a matter of fact, usage, if rightly summed up in the account of the word to be found in the Philological Society's Dictionary, affords no absolute warrant for limiting the term archæology to the second branch of the science, and there is grave reason for declining to do so. It is true that until the present century, almost every attempt to recreate the past that was not made on historical lines, that is to say, by the aid of written

[1] *See* the *Folk-Lore Journal*, Jan.-March, for full specimens of tale and custom tabulations.

records, concerned itself with the products of human handiwork. But this is no longer the case, and there is no reason for restricting a term which properly connotes the whole science to one section of it. Archæology seeks to recover the past of man under all its aspects, and investigates with equal curiosity the record of speech and custom, of myth and handicraft, of ritual and literature, comparing and controlling the one by the other. The study of folk-lore is that one of its subdivisions from which it may perhaps expect the most; it is not pretended that at present this study can lay claim to the same scientific character as other branches of archæology, but there is no reason why it should not do so in the future, and the only way to attain this end is to test it by the same standard as any other historical study. Who would have thought a hundred years ago that philology, once the most lawless of sciences, could ever be brought to the quasi-mathematical exactness it has now attained?

If the definition of archæology just given be accepted, and if the study of folk-lore, or one side of the study at least, be regarded as an important section of archæological science, the need of a sound method and of a critical spirit becomes still more pressing in proportion as the problems to be investigated lie nearer our own time. Our study is not solely concerned with the archaic: last year comes within our purview equally with the stone age. And whereas every attempt to depict the social and mental condition of early mankind must always be largely conjectural, the less ambitious task of portraying and accounting for the phenomena of modern folk-life cannot fail, if rightly prosecuted, to yield certain results. It is in this department of folk-lore studies that the introduction of a more scientific spirit will be most beneficial. Before long we may hope that the most obscure of folk-lore periodicals would refuse such an article as the one on English Christmas customs which recently appeared in the *Revue des Traditions Populaires*,[1] where, amongst other observations of national customs, we learn that at the present day mistletoe is hung over all doors to enable kissing; that young men put mistletoe in their hats, and young women of the middle class (*bourgeoisie*) stick mistletoe in their dress as an invitation to their gentlemen friends! The author of these curious statements is a Cornishman, and he may intend them to apply to his county alone; but they are so loosely worded as to leave the impression upon anyone unacquainted with the facts that the customs connected with

[1] January 1889.

the mistletoe are not only in full vogue, but are even on the increase. Whenever the history of Victorian England comes to be written with the desire of doing more than chronicle debates and battles, it may safely be asserted that the immense change of manners which has taken place within the last forty years will claim the chief measure of attention, and of that change no more striking instance could be adduced than the disrepute into which the mistletoe custom has fallen among classes of society and in parts of the country where it was habitual barely a generation ago. This is perhaps an extreme instance of the use to which the historian can put the accurate determination of the facts of folk-life, but many almost equally remarkable could be cited.

Several times in the course of this article a comparison has been drawn between the study of folk-lore and descriptive geology. The comparison may be extended to the history of these sciences, both of such comparatively modern origin. The large and daring synthesis of the earlier geologists, the schemes of gigantic upheaval and subsidence, resultant of forces assumed to be of an essentially different nature from those now at work around us, may be paralleled with the philologico-mythological explanation of Aryan religion. That, too, assumed a condition of the human intellect differing essentially from any observable at the present day. Lyell established the reign of law in geology; the "anthropological" school has essayed to do the same for the study of folk-lore. Its ideal is to admit no explanation of phenomena which is not verifiable by actual observation; its assumptions are that like conditions beget like effects, and that the human conscience and intellect have never wholly broken with the past, but in their upward progress have ever retained distinct marks of the ruder, simpler stage out of which they have emerged. The theory of evolution on the biological side has drawn many of its most telling arguments from the geological record; on the sociological side the theory will, I am convinced, receive a not less striking verification from the record of folk-lore.

ALFRED NUTT.

OLD ROADS AND FORDS OF HAMPSHIRE.

IN such a county as Hampshire, which has been occupied since the earliest residence of man in Britain, it may safely be said that a large proportion of the roads and fords are as old as the Saxon period, but as objects of antiquity which are clearly pre-Roman are constantly being found in this county, and as we possess in its old earthworks examples of human labour which may be twice as old as any Saxon work, the roads and fords which can be traced no farther back than the Saxon period, though ancient, are, in comparison with others, comparatively modern. We have in Hampshire three kinds of ancient roads, viz., first, those concerning which so much circumstantial evidence of their use in British time exists, that their origin cannot reasonably be ascribed to any later period; secondly, those well-defined Roman roads which connected the Roman cities of Winchester, Silchester, and Porchester with each other, and with other Roman stations; and thirdly, those roads of Saxon or mediæval origin which connected our ancient towns, villages, and manorial homesteads. The fords are, of course, as old, at least as regards their use by man, as the roads connected with them.

In taking a general view of the ancient means of communication in a county as a whole such as Hampshire, one is impressed with the conviction that these old ways, which were the connecting roads between different parts of it, must have been selected for their natural advantages, and probably chosen after many practical trials of the geological conditions of other alternative ways. The geologist can see in many of the old roads the best available routes which could possibly have existed for traffic through such a county. We find that many of the most ancient roads run along routes on which favourable geological conditions prevail, and cross streams where natural facilities for fording them exist. The ancient British tracks in Hampshire took those lines where nature had made the best means of communication. Some of these roads either avoid the streams altogether by crossing the county above their sources, or, where obliged to cross streams, crossing-places are selected to which, in the first instance, man was probably led by the wild animals of the chase—for there is much reason to think that the

natural fords in Hampshire must have been used by herds of wild animals before they became the accustomed crossing-places of man. Many of the fords, therefore, must have existed before the roads, and we may see probably in them the places where some of the lines of the hunting expeditions of the earliest British inhabitants of this southern county converged. When man became acquainted with the fords, he must have become better able to intercept the beasts of the chase. Some of the oldest roads in Hampshire are those which lead up to the ancient hill-fortresses, of which there are many remaining examples. I have elsewhere[1] stated my reasons for the conclusion that these earthworks or camps were the places of refuge for the British people living near them, in case of attack. They are certainly of British date, and it is quite clear that there must have been old roads or tracks leading up to them; and, therefore, where we find such old roads going up to and into these camps at the present day, from the adjacent valleys along the easiest natural lines of approach, we are, I think, warranted in believing that such ancient roads are among the very oldest in the county.

One of the best examples of this kind is the case of Old Winchester Hill fortress in the valley of the Meon. This earthwork is situated on one of the highest positions of the chalk downs of mid-Hampshire. Its site forms a projecting spur of chalk 630 feet above the sea. The scarp of the hill makes it inaccessible on the north side, and it is difficult of access on the west and south. It is on a level with a ridge of downland on the east, with which it is connected. This camp commands the whole winding valley of the Meon; a trackway from the east leads us up to it from East Meon, others on the north from West Meon and Warnford, and on the south from Meonstoke, Droxford, and Soberton. These latter roads have circuitous courses following the natural slope on to the down, and thence converging in the direction of the camp.

In some instances in which the British roads leading up to a hill-fortress are obliterated, we commonly find the entrances or gates of the camp where the former old roads entered it, in a fair state of preservation. This is the case at St. Catherine's Hill, Winchester, where the only approach to the earthwork was on the east. A remarkable road leaves Winchester on the south-east in the direction of this entrance to the hill-fortress on St. Catherine's Hill. About a mile south of the eastern suburb of the city, where this road is near the entrance to the earthwork, into which, by a

[1] Paper read in the Anthropological Section, British Association, 1888.

slight bend to the west, it probably led, it has been made, evidently by the Romans, to bend towards the east for nearly a mile, until it reaches the crest of the hill, whence, in the usual Roman fashion, a typical Roman road proceeded in a bee-line to Porchester, so that this straight road from Porchester made a sharp bend on nearing Winchester. In this case the older British road leading up to St. Catherine's Hill fortress was probably utilised by the Romans for their approach to the city, by connecting it by means of this bend with their new road from the southwards over the brow of the hill.

That some of the old roads still used in Hampshire are of British date, appears also to be extremely probable from the references to them as "old" or "hollow" ways in Anglo-Saxon charters. Of such is the "old way", still known as the Harrow way in the north of the county, and which was referred to as the "old way" in a charter A.D. 900, which is quoted by Dr. Stevens in his *Parochial History of St. Mary Bourne.* 'The hollow ways at Millbrook, which are mentioned in a charter granted by Edward the Confessor in 1045, are other examples. The Harrow way, which crosses the county from west to east, is a very remarkable road. Its present name has been derived from "har", or hoar, old, and would mean the old or ancient way. It passes from near Wey Hill eastwards, keeping along the watersheds as much as possible, and avoiding the rivers. Two streams in its course it is obliged to cross, but these are minor water-courses, viz., the Bourne branch of the Test at Chapmansford, and the upper part of the Whitewater at Biddensford. It passes north of the main stream of the Test and south of the sources of the Loddon. The railway crosses this old road close to Worting junction. In the eastern part of the county it is known by the name of Farnham lane, and south of Crondall it passes close to the old earthwork known as Barley pound. I have elsewhere[1] stated my reasons for believing that a comparatively large population occupied Hampshire in British time, and the larger this population was, the greater would be the traffic to wear the roads into hollow ways. In regard to roads, Worting, where the Salisbury and Southampton branches of the London and South Western Railway meet, is one of the most interesting places in Hampshire, for here the modern railways meet, cross the old British Harrow way, and the old Roman road from Winchester to Silchester, which itself crosses the British road.

[1] Paper, "The Distribution and Density of the Old British Population of Hampshire." Anthropological Institute, January 8th, 1889.

Hollow ways are met with in most parts of Hampshire. They are deepest where the geological conditions are such that the roads offer less resistance than in other places. This is the case in the east of the county, and particularly between Alton and Petersfield. The deep hollow ways round Selborne have been described by Gilbert White, and a century since his time has made little change in them. I think there is no reason to doubt that many of the hollow ways and old ways of the county are as old as those at Millbrook and St. Mary Bourne, described as "old" or "hollow" in Anglo-Saxon charters. If so, they can scarcely be of later antiquity than British in their origin.

Another remarkable old road is that which passes from Walbury camp in the north-west corner of the county along the ridge of the chalk downs, in a south-easterly direction, to the immediate neighbourhood of Beacon Hill camp, Burghclere, and also southerly past the Seven Barrows to the Harrow way. This is now but little used, but, until the time of railways, was used as a drove for cattle on their way to the London market. We have also in Hampshire some remains of ancient north and south ways, which, like the Harrow way, avoided the rivers. One of these was that which climbed the ridge of the Buckholt Hills in the west of the county at Whiteshoot Hill, which appears to have come southwards from East Cholderton on the Wiltshire border, and to have passed near Quarley Hill camp. Not far from the line of this road, and on what was perhaps one of its branches, a pig of lead, now in the British Museum, was found about a hundred years ago. A little south of Whiteshoot Hill this old way crosses the Roman road from Winchester to Old Sarum, and close by this intersection there is a part of the Roman road, now disused, slightly raised above the fields, which remains in a condition very much as the Romans left it. The road up Whiteshoot Hill, now little more than a farm road, is very much worn into several hollow ways by the traffic of many centuries. Near the intersection of these roads the remains of some Roman glass factories were discovered by the late Rev. E. Kell, F.S.A.

The arrangements which in very early times appear to have been made for crossing streams where the water was too deep, or the marshes too waterlogged to be safely forded, appear to have been by the construction of stokes and wades. Stokes have been described by some writers on place-names as stockaded places, *i.e.*, as I understand, places with a stockade for defence. On the contrary, I consider the old stokes to have been places where some

artificial arrangements by means of stakes, or a stockade way, were made for crossing streams and bogs. In Hampshire, all the places known as "stokes" are connected with passage-places across water. We may say that nature formed the fords and man formed the stokes and wades. Where a crossing-place became necessary, and the stream was too deep to ford, it would as naturally occur to the ancient inhabitants of this country to throw stones and gravel into the stream to make the passage easier, as it would to anyone at the present day. Where such a bank of stones could find sufficient support to withstand the rush of the stream, the arrangement appears to have been known as a "wade". Where it was found necessary to strengthen it by driving a sufficient number of large stakes into the stream to keep the bank of loose materials from moving, the work would, I think, have been known as a "stoke". In later time, as bridges took the place of stokes, the old names not uncommonly remained, and in some instances, as in that of Stockbridge, the double name remained. The precise difference between a stoke and a wade, however, if indeed there ever was much difference, appears to have disappeared in the course of time, as may be seen in the examples of certain Hampshire wades connected with Hayling Island and Portsea.

A few of the stokes in Hampshire are situated on the upper parts of small chalk streams, where it would, at the present time, be easy to cross the streams; but it must be remembered that a crossing-place was necessary at all seasons, that a great volume of water often bursts forth suddenly from the springs in the upper part of chalk streams early in the year, and that cultivation and occupation have drained the marshes and diminished the rainfall. At Stoke Charity, on the Micheldever stream, a mile below the village of Micheldever, there is at times a great flow of water from the land drainage, and from the chalk springs at Micheldever, the place of "much water". A stoke, therefore, must have been found necessary to ensure a safe crossing at this place. At Basingstoke, also, there is but a small stream, but its occasional volume of water is great, its ancient condition must have been marshy, and a stoke was also probably necessary here to ensure a safe passage. At Stoke, on the Bourne tributary of the Test, the Stoke-by-Hyseburn of Anglo-Saxon charters, the stream is for some months in the year now usually dry, but at other seasons the volume of water is great, such as would have made it quite necessary in Saxon times, when rainfall was probably greater, to have provided a stoke. Some of the places where old roads cross

the Test and Itchen have names denoting that stokes existed there, such as Laverstoke, Longstock, and Stockbridge on the Test, and Itchenstoke and Bishopstoke on the Itchen. A place known as Hurststoke on the Medina river in the Isle of Wight, south of Newport, appears to have been an ancient passage-place across that river, which is tidal at this point. Another stoke at a tidal place is that on the east of Hayling Island, called East Stoke, which, before the great destruction of land here by the sea, in the middle ages, was probably a place of local communication.

There were probably many stokes formerly existing in Hampshire and other counties, the names of which are now lost, but occasionally some reference to them comes to light. This is the case in regard to Christchurch and Romsey, two of the monastic towns of the county, and places where it is reasonable to suppose that bridges would be constructed at a very early date over the rivers by the religious houses which were located at these places as early as the Anglo-Saxon period. The Avon at Christchurch, close to the sea, must always have required some artificial arrangement to have made it safe to ford at all seasons; and the name "Stoke mede" occurs in old documents. The name "Romes-stok", also, is mentioned in connection with Romsey Abbey as late as 1291, in the Taxation of Pope Nicholas.

One of the most remarkable old wade ways in Hampshire is that which connected Hayling Island with the mainland. This appears to have been a roadway staked on one or both sides, with stones thrown in to make a passage for carts at low water. By long-established custom, a manorial wood on the Bishop of Winchester's manor of Havant, and still known as Havant Thicket, was required to supply timber for repairing this wade way. A similar wade way across tidal water appears to have existed on the Itchen, and connected the Bishop's manor of Bittern with Northam. One of the oldest wades of which we have any record in the county is that at Ringwood, a place known as Rinwede in Domesday. The Norman-French commissioners probably pronounced "wede" as we pronounce wade, and in Hampshire "rin" or "rine" is probably a British word for water. The stream above the bridge at Ringwood is still commonly waded by cattle in summer, but the place appears, since the construction of the causeway connecting the bridges, to have become a natural ford, if it was not originally such. A few miles south of Romsey there is a place known as Wade Farm, close to a branch of the Test, and this

appears to have been known as The Wade in the Perambulation of the New Forest, *temp.* Edward I.

The chief Roman roads in Hampshire are well known, and it will only be necessary for me briefly to mention them in this paper. These roads converged on Winchester and Silchester. The great military road connecting these places passed out of Winchester on the north, and it is still used in places as part of the highway to Basingstoke. Near the London lodge of Stratton Park, the line of the old way may be seen inside the park enclosure, the modern road having been slightly diverted. The old road may be traversed near Worting, but northwards through the parishes of Sherborne and Bramley to Silchester it appears to have been enclosed since about 1415, when an Inquisition was held to report what damage would result from its enclosure by William Brocas, Esq. The entry in the "Inquisitiones ad quod damnum" relating to this road is: "William Brocas, Esq., Includere & tenere possit quendam viam in Sherburne, Bromleghque, se ducit ap̄ d̄ca villa usque Silchester per medium parci predc̄i W. Brocas sibi & hered suis", etc. This affords us a glimpse of the legal procedure which was necessary to finally stop up part of one of the great Roman highways to the deserted city of Silchester, liberty having apparently been previously given for the enclosure of a park.

The Roman road from Winchester to Cirencester can be followed for miles near Tangley, and also through Harewood south of Andover. Near Winchester it forms the ordinary highway. Between Winchester and Old Sarum, the Roman road can be well seen, as already mentioned, near Buckholt Farm. The road southward from Winchester to Clausentum may be seen as a disused track by the side of the modern road south of Compton Down. The Porchester road may be traced for many miles across the Downs south of Winchester. From that city there appears to have been a less important road to Speen on the north, and another eastward into Surrey. From Porchester a road went through Havant to Chichester, and another went in a north-west direction to Clausentum close to Southampton. From this station another lesser road appears to have proceeded westward into Dorset, crossing the Test between Nursling and Redbridge, and crossing the Avon either at Ringwood or Fordingbridge, or branches of it crossing at both places. The great military roads from Silchester to Sarum and London can be still followed or traced from the gates in the walls of Silchester which still remain.

In the folk-lore of Hampshire, the disused parts of the Roman

roads which remain are frequently associated with the name of the devil. To describe an ancient engineering work, which people could then scarcely understand, as the Devil's highway, or the Devil's dancing-ground, would seem to be quite natural in the middle ages, and from these ages such names have no doubt come down to us.

As might have been expected in a county containing such a large area of chalk, flint was the material which was commonly used by the Romans in the construction of their military roads in Hampshire. The geological denudation of the chalk, continued for many ages, must have left on the surface of the land a vast accumulation of flint nodules. These appear to have been collected to form the bases of the Roman roads, while the drift gravel and Tertiary pebble-beds appear also to have been used. That part of the Roman road from Winchester to Sarum which passes near Farley Mount, when examined by Mr. J. Smith, surveyor, of Romsey, was found to be paved with large pebbles of the Lower Bagshot age, which could be obtained at no great distance from this place.

Until they were worn out, the Roman roads were no doubt used as their chief highways by the Saxons and Normans as well as by the Romans. It was along the Roman road to Sarum that William the Conqueror must have passed in August 1086, to the memorable meeting with his subjects from all parts of the kingdom near Sarum, and the traditional place at which he camped near this road, is still called Norman Court. It was no doubt also along this road, now disused, through Buckholt forest, part of the forest of Clarendon, that Henry II and his court passed more than once to important meetings at Clarendon, just beyond the Hampshire border.

In studying the ancient fords and wades of Hampshire, I have been struck with the practical knowledge shown by those who first adapted them for their use, and those who subsequently made the bridges. Many ancient fords may be seen in this county with bridges, whose origin is of Saxon or mediæval date, close by them. A bridge at Ringwood appears to have been made at an early date, for it is mentioned *temp.* Edward I as an eastern boundary place of the possessions of the Earl of Gloucester. Two of the earliest bridges of which we have any record in Hampshire took the place of important fords near the tidal limits of the Test and Itchen, viz., Redbridge, anciently Reodford, over the Test, and Mansbridge over the Itchen, both of which gave their names to the Hundreds,

and were, perhaps, the moot-places of the Hundred courts. Other ancient fords occur at the tidal limits of streams, such as the ford where the bridge now passes over the Hamble at Botley. Some old fords appear, probably for safety, to have passed obliquely across streams, a good example of which is seen at the present day at Watton's ford across the Avon, south of Ringwood.

Some of the most remarkable disused road-tracks in Hampshire are those which led to the ancient fords. Until quite recently, an old road track could be seen going up the down near Shawford Railway Station from the old ford. This track was about three feet deep, and, from long disuse, the sides had fallen in, giving a slope to its banks, and making it exhibit an appearance almost **V**-shape in section. A somewhat similar old road may be seen at Headbourn Worthy, a few miles further north, and such roads are probably old packhorse tracks to the fords.

Among the most important fords in Hampshire is that which at the time of the Domesday Survey was specially known as Forde, and which subsequently gave its name to Fordingbridge. That this was a place of special importance as a crossing-place on the Avon, and which natural circumstances had marked out to be so, is clear from its distinctive name of Forde. It was apparently a chief ford across the Avon, as another place, also known as Ford, was the chief ford of the Test. That across the Test was at the place where the Roman road from Winchester to Sarum crossed the river. This name has long since been forgotten, but is mentioned in an Inquisition 15th Richard II, in connection with certain lands and tenements of the Priory of Mottisfont, not far from it. Those who have investigated the Roman roads of Hampshire are generally agreed that a road westward from Clausentum crossed the Test somewhere south of Nursling, but no one has satisfactorily traced this road farther. From the circumstance that Fordingbridge is almost due west of Nursling, from the straight character of the present road for miles, and that Roman remains have been found at various places on or near the line between these places, it would appear probable that a Roman road passed into Dorsetshire across the Avon at Forde. There is some documentary evidence in support of this view, for in the Perambulation of the New Forest in 1670, "the highway that used to go from Fritham to Fordingbridge" is mentioned. This old highway can be followed also from Brook to Fritham, and from Brook the present straight highway from the east makes a detour along the north of the forest.

This old highway through the forest may have been diverted at the time of the afforestation.

In those parts of Hampshire where the Roman roads served as useful routes of communication between the Anglo-Saxon towns, they appear to have been maintained as local highways, and now form the modern highroads, as in many places near Winchester. In other parts, where there was not much traffic, they have been preserved as grass roads, as near Tangley, or entirely obliterated, as some of the roads near Silchester; but in other parts of the county they appear to have been used for the purposes of local communication until they were worn out, when they were abandoned for newer local roads, and examples of this may be seen in several parts of the county.

It is not my object in this paper to describe the origin of roads of Anglo-Saxon date. In Hampshire, with the exception of certain modern highways, it is difficult to find a country road which is of less antiquity than the middle ages, and most of them are probably as old as the time of the West Saxon monarchy.

T. W. Shore.

THE THREE HIEROGLYPHIC SYSTEMS.

TWENTY years ago it may be said that only one hieroglyphic system was known (not counting the undeciphered emblems of the Central American cities), since cuneiform was not then shown to have developed from a hieroglyphic character, while the existence of the Altaic system (popularly called Hittite) was as yet unsuspected. At the present day, when the three systems are better known, it becomes natural to attempt their comparative study, carrying into this question the same principles which have led to the scientific derivation of all known alphabets of Asia and Europe from the old Semitic alphabet of Phœnicia.

As regards the origin of the cuneiform, the basis of a study of its development appears to have been first laid in 1878 in a paper by the Rev. W. Houghton, but the materials at his command were meagre as compared with those derivable from the inscriptions of Tell Loh, published by De Sarzec in 1887, and carefully tabulated by Amiaud and Mechinau. In 1883 I was much struck by the numerous similarities which can be traced between the Egyptian and the Altaic symbols. There are some forty cases of very clear resemblance, and in some of these the sounds as well as the form and meaning agree. The similarities between the Altaic and the cuneiform are equally numerous and suggestive, and the coincidences of sound in this case amount to about eighteen out of some forty-five emblems.

Coincidences between Egyptian and cuneiform were very early noted, and in 1887 an important paper by Mr. G. Bertin was published by the Royal Asiatic Society summarising what was known up to date respecting these comparisons. The question which therefore arises from the *primâ facie* evidence is, whether such resemblances are merely due to the fact that similar objects may independently have been drawn, in a similar manner, by races having no connection with one another, or whether a real community of origin is to be supposed. It seems curious that in an age when the comparative method has been so extensively and successfully applied, there should still be hesitation among scholars concerning the utility of a comparative study of three systems of writing used in the same ages, and in countries immediately

adjoining each other. There are, however, some reasons why cautious students should feel such hesitation; the first being that the languages of the inventors may have differed radically, and the second that natural objects would inevitably be represented by similar drawings, and actions such as "give" and "go" would naturally be symbolised by the hand and foot, even by races never communicating together. On the other hand, similarities in the representation of abstract ideas would not be so naturally expected,[1] and if such are noted the question becomes one for further inquiry.

It is not, however, in writing alone that comparisons may be drawn between the Syrians, the Babylonians, and the Egyptians. In art, in religion, in architecture, and in mechanical contrivance, as well as in mythology and folk-lore, equally remarkable similarities occur. It is now admitted that a Turanian stock existed both in Chaldea, Media, and Asia Minor, and also in Syria and in Egypt, although the oldest stock in the latter country was pretty certainly not Turanian, but North African, with a language distantly allied at a remote period with the Semitic. According to the generally received opinion, the cuneiform system owes its origin to the Turanian people. The Altaic (or Hittite) is also admitted by many scholars to be of Turanian origin, and in this case therefore the comparison of the two systems is most important. The reasons for suspecting a common origin for the Egyptian as well will appear as we proceed, but it is evident that the Turanian system may have been applied to an African language in Egypt quite as easily as, or indeed far more easily than, to a Semitic language in Mesopotamia. The Aryan Greek, and the Turanian Etruscan, both adopted the Semitic alphabet, although the letters were not quite suitable to the sounds of their languages; and the Aryan Persian and Semitic Assyrian modified and adopted the cuneiform. There is, then, no innate improbability in the adaptation of Turanian hieroglyphics to another language in Africa, which, though distinct in grammatical construction and in vocabulary, was still like the Turanian, yet in the agglutinative stage.

For it is to be noted in passing that language and writing grow side by side. The graphic system followed the language, and as

[1] A very important instance is the "swallow". In Egyptian it is used as the determinative of evil. In cuneiform it is called "the bird of fate". It figures in the Chaldean Deluge story. No doubt the autumn and spring migrations of the swallow account for this emblem, for the bird was a prophet, foretelling winter and summer. The tens in number are also both in cuneiform and Egyptian denoted by a hoop-shaped emblem, ∩.

the "weak roots" were tacked on to the "strong" or noun-verb roots, so were their emblems tacked on to the pictures representing the latter. A series of strokes represented the plural, a male or female emblem stood for the pronoun, and the sign for country was used for "at" or the arrow for "to". There was nothing arbitrary in such representation. It was as purely a natural growth as was that of the language itself.

The gradual changes of the later stages are equally natural, and equally parallel to the development of language; but the true hieroglyphic stage is that which belongs to the agglutinative stage in language. Thus, while the plural of man was "man-s", two emblems—a man and a series of strokes—would represent the word in the plural. When, however, the plural was formed by inflection, *men* could not very well be spelt "mans". Hence a more abstract conception arose, and the emblems were used simply as syllables, not as words at all; "men" was spelt *me-en*[1] by two syllables, each of which in earlier times had been a distinct word. In cuneiform we can trace this change occurring, and the transition from one to the other—from the word to the syllable—is very plainly observable. Egyptian, as we know it, was not a monosyllabic language, and when the syllable began to come into use, it was therefore necessary to cut down the word to a monosyllable. The use of cuneiform in a foreign language (Semitic) was the immediate cause of the conception of the syllable, and the same may have been the case in Egyptian; but in Tartar languages it was not necessary to cut down the word, because these languages, from the dawn of history, have been mainly monosyllabic. Any student of Turkish or of Chinese will recognise this monosyllabic character of the Turanian speech; and hence the change from word to syllable presented no great difficulty in Turanian tongues, and the monosyllabic emblems for words were ready to hand when Semitic scribes began to use them as syllables.

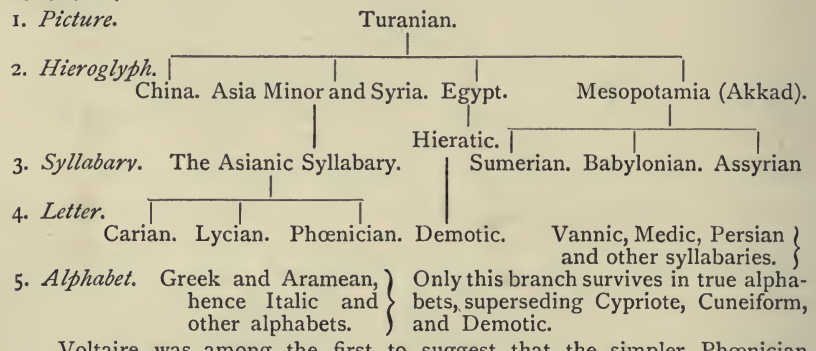
The confusions which were introduced into cuneiform through the employment of the original system in several languages, through its elaboration by scribes, and through the loss of the original meanings of the emblems, are so numerous and puzzling that it seems almost hopeless to escape them. In Egypt the same elaboration—which has reached its climax in Chinese—went on for a long time, but the Egyptians found a way of escape in an alphabet.

[1] For example, the Assyrian god Anu has his name spelt *A-nu*, originally "water-not", but his name has nothing to do with either word, being originally Anna, "the God on high", or sky deity.

The Phœnicians in like manner arrived at the same abstract idea of simplification through the use of syllables having a weak vowel sound.[1] The clumsy cuneiform itself produced a Persian alphabet, but the greater simplicity of the Phœnician letters led naturally to their superseding even the modified and simplified cuneiform alphabet. Thus, of all the various ramifications of the three systems, the net result is the alphabet of Syria.

There is another element of complication to be considered before proceeding to details, namely, the use of determinatives. They belong to the later hieroglyphic stage, and are absent alike (generally speaking) from the picture writing of primitive man and from the alphabet of civilised races.[2] The determinative is a picture showing the object, or the class to which the object belongs, placed beside the syllabic spelling of the word. There are about seventy common signs of this kind in Egyptian, besides others which are rare. In Semitic cuneiform they are less numerous. In the old Akkadian texts, where the writing consists mainly of words, not of syllables, it appears, according to some authorities, that what are called determinatives are rather words, to be pronounced in addition to the rest. The use of this double system was not originally necessary; it came in as the symbols ceased to be used according to their picture-value, and were indiscriminately employed for their sound-value. In order to avoid hopeless confusion, a picture had to be added to the sounds. One reason for this confused use of the original emblems was the change of lan-

[1] The pedigree of these various systems would seem to be somewhat as follows:—



Voltaire was among the first to suggest that the simpler Phœnician alphabet superseded hieroglyphics for commercial reasons, the trader having no time to devote to learning four or five hundred signs. (See *Phil. Dict.*, article "Alphabet.")

[2] In Persian cuneiform a few survive, and some of our conventional signs have the same use.

guage. Thus *Ki* meant "place" in Akkadian but not in Assyrian. In the latter language the emblem might be used for "land" with the value Irtsitu, or for a syllable with the old value *Ki*. Another reason for confused use of the emblems was the law of "phonetic harmony", which belongs to Turanian languages. Thus, in compound words, the sound of the attached particles is modified, to harmonise with the sound of the root. This was the case apparently in Akkadian and in Medic, as well as in modern Tartar, Mongol, and Ugric languages. Thus the pronoun "I" had in Akkadian the sounds *ma*, *mu*, *mi*, *me*, *am*, *um*, *im*, according to the sound of the word to which it was attached. These sounds were represented by different signs, such as *mi*, "black"—a representation of rain falling from heaven; *im*, "wind"—a sail, etc.[1] In an earlier stage, no doubt, some single ideographic emblem would have been used without regard to the vowel-sound of the pronoun.

It is perhaps clear that a hieroglyphic system in which these various confusions do not occur is probably earlier than the time when the ingenuity of the scribes had complicated the rude original writing; but surer marks of date are to be found in the number of characters employed, and in the preservation of their pictorial forms. The cuneiform emblems now known amount to about 550. By aid of the Tell Loh texts it is possible not only in more than seventy cases to discover the original hieroglyphic form of the emblem (such as a star for "god", an arm for "power", a foot for "come", a pair of legs for "go", a square for "enclosure"),[2] but also to determine a large number of compound emblems, sometimes with one sign above the other, sometimes with a sign inside. Thus "marsh" is represented by "enclosure" with "water" inside; "princess" by the sign for "female" above "prince"; giving a series of types, interchanged, and allowing of a series of classes, which reduce the system to about 130 original signs. These compound emblems, one placed inside the other, are also known in Egyp-

[1] The result of this indiscriminate use in later Akkadian of the syllables, without reference to the original picture-value, is to render translation extremely difficult.

[2] The accompanying plate gives sixty-six examples, of which thirty-seven are found also in the Hittite system, often with the same sound. The compound emblems, with a few exceptions, are, however, omitted. The emblems are all turned through a right angle to their original position as on the oldest texts. Mr. G. Bertin seems to have been the first to see that this rule applied without exception to every cuneiform emblem. To fourteen identifications of the original form already made, I have added on the plate fifty-two, many of which are very evident, and have no doubt suggested themselves to others.

PLATE I.


Late.
Early.
Word.
one
man
plough
God
axe
bird
creator
swallow
prince
lord
open
fill
ship
two
bull
wild bull
house
town
wood
bronze
tablet
house
reed
altar
crown
papyrus
hand
hand
germ
bow
go
oppose
young
female
son
corn
growth
measure
wind
chief
beast
sun
mound
top
face
lord
star
dark
king
eye
land
place
heart
fish
reed
fire
man
put
go
dog
water
fort
heaven
month
sheep
balsam

tian; and in Chinese this method of forming new signs by compounding two or more original emblems together has been carried to great lengths.

Lenormant considered that the cuneiform system originally consisted of about 130 emblems, and recent discoveries have confirmed this view. In the Altaic or Hittite, the system, as at present known, includes not more than 130 signs, and the compound or included emblems are so rare that only two possible cases can be cited.

There are thus several good reasons for supposing the Altaic to be more primitive than either the Egyptian or the cuneiform; 1st, because of the fewness of the emblems; 2nd, because there do not appear to be any determinatives—the writing being ideographic rather than syllabic; 3rd, because of the pictorial character of the emblems; 4th, because of the method of arrangement of the writing in lines running horizontally, while the words are in vertical columns. This is the old Akkadian arrangement of the texts at Tell Loh; 5th, the absence of "included" or clearly compound emblems. It is only natural to suppose that the Syrian hieroglyphics must be of very great antiquity. We have one text known to be earlier than 1400 B.C., but since the Phœnician alphabet is at least as old as 1200 B.C., and since it was preceded by a syllabary (the Asianic) which had grown probably out of the Hittite, just as the hieratic grew out of the Egyptian hieroglyphics, it is fairly certain that the hieroglyphic stage in Syria was attained as early as in Egypt, viz., about 4000 B.C., or earlier.

The comparison of Hittite and Akkadian is justified by the occurrence of the words Essebu, Nazi, Tar, Sar, Aka, and many others, among the names of princes, and by the identical sound of the plural, and of some of the pronouns and post-positions, while the geographical lists give abundant indications of close connection between the two languages. No serious attempt to refute this evidence has yet been made by any competent scholar.

In the case of Egyptian, it may be urged that we have to do with an African language which is certainly distinct from Turanian speech. This is quite true; yet in the Egyptian dictionary will be found at least 150 foreign words, which are clearly of Turanian origin. The portraits of Egyptian chiefs about the Hyksos period have also been pronounced to be of Turanian type, and it is generally admitted that a Turanian element found its way to the Delta not later than 2000 B.C.; indeed, some of the Turanian words are traceable back to the Ancient Empire, and as in several

cases they refer to chiefs and to government, it is probable that the Turanian was the ruling or dominant factor in the population. Other words show that they must have been to a certain extent civilised, possessing not only flocks and herds, but also fields and cities.

That the art of picture-writing was known before the separation of the Ugric, Finnic, Turko-Tartar, and Mongol peoples, and before the Turanian element found its way to Egypt, appears to be shown by the fact that the word for "writing" is common to all these languages. The root is *Sar*, and its primitive meaning was to "scratch", hence to draw or to engrave,[1] and hence to write. The art of hieroglyphic delineation was thus probably known from a very remote period to the various families of the Turanian stock.

The next objection is that already mentioned, which urges that the comparison is simply pictorial. To a certain extent this is true. The emblems which can be compared are those which represent objects or actions, not those which represent pronouns or particles. The Hittite pronouns are peculiar to that system; so are the similar parts of speech in Egyptian. If we find the head of an ass, or bull, or ram, or a hand or foot, used both in Hittite, in Egyptian, and in cuneiform, this is not enough to prove the common origin of the three systems. When, however, we can show that *le* was the Hittite word and the Akkadian word for "bull", and that the well-known Tartar and Mongol[2] word *Khar* for "ox" occurs both in Akkadian and in Egyptian (as does the word *Gut* for "bull", also in Egyptian, Akkadian, and Chinese), we stand on very different ground. The hand in the act of grasping has the value *To* in Hittite and *Tu* in cuneiform. The tiara or mitre in Egyptian has the sounds *Kha* and *N* attached to it, and in Akkadian *Khan* and *Un* (or *Nu*) mean "majesty" or "prince". The Hittite emblem of the arm grasping a stick has the sound *Ta*, and in Egyptian *Ta* means "stick" or "beat", and is accompanied by the same emblem as a determinative. These are indications which should not be overlooked, and the natural conclusion seems to be that, though the three hieroglyphic systems diverged at a very early period, before the writing had become more than a somewhat conventionalised picture-system, and when what are

[1] Mongol *sor*, *zor*, "to draw"; Uigur *serge*, "writing"; Tschuwash *sira*, "write"; Mordwin, *sorma*, "writing"; Akkadian *sar*, "write"; Egt. *serr*, "inscribe, draw, write".

[2] Tunguse *sar* and *ökör*; Mongol *uker*; Vogul *kar*, *khar*, *kher*, *kir*; Ostiak *kār*, *khār*; Burgät *kur* (Esth. *härg*, "calf"); Egyptian *kher*, "bull"; Akkadian *khar*; Hungarian *ökör*; Finnish *kirgo*.

called "phonetic complements" had not as yet come into existence, nevertheless all three systems are but separate developments of the original Turanian invention of pictorial writing.

There is a peculiarity about the comparison of the Hittite or Altaic and the Egyptian which is also suggestive. The emblems which are similar are those used as determinatives in Egyptian, which were probably among the oldest and best known of the 400 signs. Of these determinatives there are about 70 widely used. They do not appear to be connected with the 23 determinatives used in cuneiform, with one or two exceptions, and they are placed after the word, not before it, as is usual in cuneiform with a few exceptions. The employment of determinatives was a later invention, long after the separation of the different systems, hence the signs so employed are quite distinct. The Egyptian determinative often accompanies a foreign Turanian word (for the rich Egyptian language included 50 or 60 Semitic and perhaps 200 Turanian imported words), and in such cases the meaning, and the sound which accompanies the determinative, are both sometimes closely the same as those which may be given to the Altaic or to the Akkadian cuneiform emblem. For instance, the words *Gut* and *Khar* in Egyptian denote bull, and have a bull for a determinative. In cuneiform the bull's head stands for the same sounds.

The comparison often includes abstract ideas, as when heaven is represented by a sort of yoke-like object standing for the firmament, and deity by a star, storm by rain from the firmament, and royalty by the peculiar tiara head-dress. The occurrence of such resemblances is fairly strong evidence of common origin, in addition to which it has been noted that in all three systems originally the emblems face to the right hand, that *words* are arranged in vertical columns, and that animals are represented by their heads and actions by limbs.[1]

[1] The direction in which the writing reads is a matter of interest. The Tell Loh Akkadian texts read from the right; the Hittite read alternately from right and from left; the Semitic cuneiform from the left; the Egyptian in different ways. The earliest Greek texts read like the Hittite texts, alternately from right and from left. This seems to indicate that although the great Ionian alphabet which superseded earlier Greek scripts has been referred to a Lydian and Aramean origin, it may really have been obtained from the non-Semitic inhabitants of the same country, if (as the discovery of the Carian system of writing, I believe, shows) the true origin of Asiatic alphabets is to be found in Asiatic syllabaries. It is certainly remarkable that the Greeks as a rule wrote the opposite way to the Semitic race in Syria, for they continued to use the same letters, and these, when not symmetrical, seem to have belonged to a hieroglyphic system facing to the right.

It is generally held that the cuneiform is of Akkadian origin. Mr. Bertin alone, I believe, does not agree with this view, but it appears to be rendered probable by several considerations: 1st, the Akkadian texts are ideographic rather than phonetic (*i.e.*, written in words, not in syllables), and this, together with the agglutinative language, marks an earlier graphic stage; hieroglyphics would not be invented by persons speaking an inflected language. 2nd, it has been noted that the Semitic sounds of the emblems agree with the Sumerian or later Akkadian, which is written less ideographically; and 3rd, it is also noted that emblems which had their sounds written inside them to give greater clearness, have been imported, as emblems only, into the Semitic system, the sounds being Akkadian. These circumstances cannot well be explained on the contrary hypothesis that the Akkadians borrowed from the Semites.

In Medic and in other languages a kind of selected syllabary occurs, but it is very doubtful if this selection was arbitrary. The Medic, which is said to be derived from the Assyrian—which it resembles—consists entirely of emblems which are of great antiquity, and which as a rule are not compounds, but simple hieroglyphs. It would seem that the Medic scribes had escaped from the pedantry of the later Assyrian writers, and that the ingenious elaboration of the original system which the latter evolved was unknown to the local calligraphists who wrote in Medic.

What is still more important is, that the single sound belonging to these Medic emblems is always an Akkadian word for the object represented (whenever that object can be distinctly recovered), so that none of that confusion which is said to be found in Assyrian cuneiform has occurred in Medic. This seems to show that the Medic divided off before the pictorial value was quite forgotten, and before confusion, due to its being lost and to the syllabic value alone being retained, had commenced. The number of signs used in Medic (109 phonetic and 12 ideograms) also approaches the original number of signs in both cuneiform and Hittite, and the numerals are the same as in the Egyptian, including the tens.

We have seen that the further back we look the more does the hieroglyphic writing in every country approach to the original picture-record. For this reason, in the Altaic or Hittite system, which appears to be so very primitive, we should expect the values of the emblems to be more generally ideographic than phonetic. We can hardly suppose that determinatives would occur in a system with so few emblems, and in which the pictures are still so easily

understood ; and in the short bilingual boss no such determinatives appear to occur. At the same time, the conventionalised character of some of the signs shows that we have to do with *hieroglyphic*, not with *pure picture* writing, and this class of signs appears to have been used phonetically to express the relationship between the larger emblems standing for noun and verb.[1]

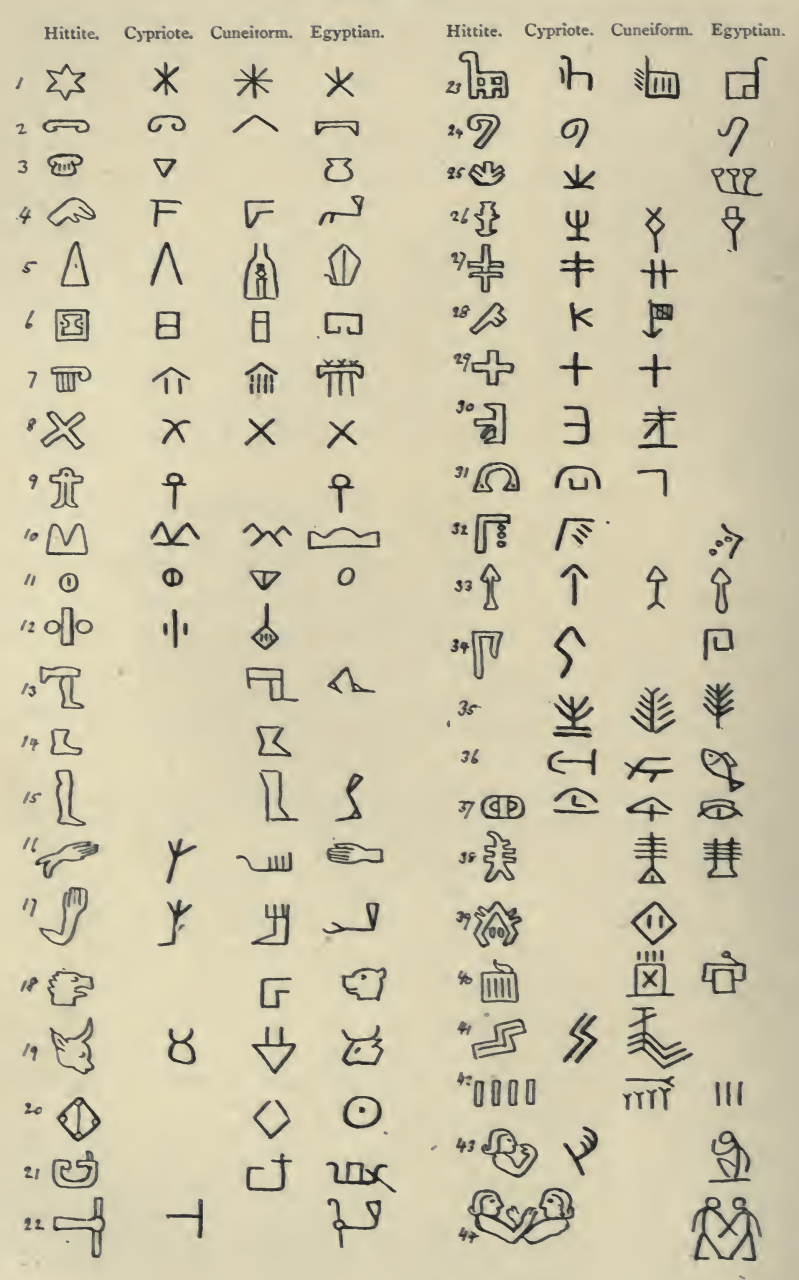
The sounds which belong to the Hittite emblems can only be recovered through the Asianic syllabary, which represents the "hieratic" stage in the system. In most cases the syllabaries only give us *one* sound for the hieroglyphic, but it is fairly certain that the noun and verb emblems, at least, must have possessed many other sounds, because there were other words for the object or act. Thus the Cypriote gives us *le* for "bull" (*le* or *lu* in Akkadian), but probably the words *Gut* and *Khar* would also have existed in Hittite (being widely spread terms for "ox" in Turanian speech), and these sounds also would consequently have belonged to the emblem *le*, the bull's head.

I conclude, therefore, as regards the Hittite :—1st, that it is a system probably used about 4000 to 2000 B.C. ; 2nd, that it is very primitive, with few signs, and probably no determinatives: nearer to the oldest Akkadian[2] than to any other system of writing, with ideographic emblems and phonetic grammatical signs ; 3rd, that the language has now been discovered (in 1887) to be Turanian, and that it is probably nearer to Akkadian than to any other Turanian tongue ; 4th, that the comparative study of cuneiform,

[1] These grammatical signs being the commonest on the texts, appear to have survived in Cypriote, and I have proposed to recognise them as follows: *Mu*, "I"; *Ne*, "he"; *Zo?* "thou"; *Me*, "plural"; *Na*, "of"; *Ti*, "at"; *Sa*, "with"? *Li*, "to"; (adjective); *Ga* (adjective and precative); *Ke* (personal); *Ka*, "towards"; *Pi* or *S* (personal); *No*, "negative"; *Po*, "this"; *A* (participle) *Ua*, "and", or *u*. All these values are common to many Turanian languages, Tartar, Ugric, and Finnic, as well as to Akkadian, Medic, and in some cases Etruscan. Some occur in Basque, some in Hungarian, but the nearest approach on the whole is found in Turkish and the Tartar dialects. In addition to the single emblems we have many valuable compounds, such as *Mek* (the Turkish *mek*) *Kan*, "this"; *Kaka*, "cause"; *Tas* (adverbial); *Nak* (personal); *Nal* (personal); etc., etc. About one hundred words in all have, I believe, been recovered from the personal and geographic lists and from the Cypriote.

[2] The town names of Asia Minor are very often comparable with Turanian roots, and the same names occur in Italy and Spain. Recent research has, indeed, connected Aryan and Turanian speech ; but the chief peculiarities of the Aryan (gender, and the position of the plural) do not seem to be traceable in the early languages of Media, Asia Minor, and Mesopotamia, which are in the agglutinative stage when first we become acquainted with them.

PLATE II.


Hittite.
Cypriote.
Cuneiform.
Egyptian.
Hittite.
Cypriote.
Cuneiform.
Egyptian.

Egyptian and Hittite hieroglyphs will serve to throw much light on the last named, and to supplement the information obtainable from the Asianic syllabaries.

On the accompanying Plate the details of a comparison of Hittite, Cypriote, Cuneiform, and Egyptian may be studied. The sources whence the emblems are derived are reliable and recent; vouched for by the names of Deecke, Amiaud, Brugsch, and Pierret; and the Akkadian words are not only those accepted by Lenormant and Delitszch, but (in order not to rest on authority only) I have in most of the cases verified their existence as Turanian roots by tracing them in Medic, in Etruscan, in the Finnic vocabularies of Donner, in the Tartar vocabularies of Vambéry, and in the Turkish dictionary (in which, of course, foreign words must be carefully set aside). Out of 800 Akkadian words, about 200 are traceable in Turkish, 60 or 70 in Medic, 400 in Tartar dialects, and many also in Mongolic dialects, in Ugric and Finnic speech, and a few in Chinese. The grammar of Akkadian, however, is nearer to that of the Manchu Tartar than to any other living speech as yet compared, except the Basque.

Taking the emblems in order, a few remarks may serve to explain the plate.

1. *Star.*—Occurs on the Hittite seals, and is used in Cypriote for *a* and *an*. The cuneiform *an*, meaning "god", was originally a star, and in Egyptian the star denotes deity.[1]

2. *The Firmament.*—Compared with the Carian U, might have the values Ub and Pa.[2] The cuneiform U represents the firmament, standing for "sky". The Egyptian emblem of the firmament, among other words, belongs to the sound *Pe*, "heaven". From this emblem possibly the Greek *Omega* may be derived.

3. *The Water-pot.*—Compared with the Cypriote *Ya* and Carian *a*. In Akkadian and Susian, *a* means "water", and the word survives in Ugric and Finnic speech. The cuneiform and Egyptian emblems for "water" are representations of waves, but the Egyptian pot is a determinative for liquids, with the value *Nu* or *N* as a syllable, meaning, as Mr. Bertin points out, "fresh water". It also accompanies the word *aaa*, "vase"; and *a* in Egyptian means "to wash". It is, I think, from this emblem that the Phœnician letter *Ain* takes its origin.

[1] Compare Etruscan *an*, *un*: Aino *aina*, "god"; Turkish *Ana*, "Saint".

[2] Tartar *u*, *uv*, *ub*, "curved"; Akkadian *Pa*, "the firmament"; *ub*, "heavenly region"; *u*, "day".

4. *The Hand.*—The cuneiform *Tu* (also *Tuk*) means "to take" or "have", the root meaning "touch". The Egyptian hand is a common determinative for words meaning "touch" or "give" (*Tu* means "give" in Egyptian.) The Cypriote sound is *To.*

5. *The Tiara.*—In Finnic and Ugric speech, the word *Ko* or *Kho* signifies "long", "high", "bright", "precious", and it has all these meanings in Akkadian. Hence it appears to have come to mean an "illustrious" person, *Ku* being "king", according to Lonormant and Norris, in Medic, while in Akkadian the word *Ku* or *Ke* for "prince" is acknowledged by several good authorities. The cuneiform emblem of a tiara has the sound *Aka*, which is the Turkish *Aka*, "a chief". The Egyptian mitre is the determinative of *Kha*, "glorious". The Cypriote sound is *Ko.*

6. *The House.*—In all the systems E means "house", and has a similar sign.

7. *Rain.*—If the correct sound has been obtained for the Hittite, *Re* may mean "shine" or "flow". The cuneiform emblem *Mi* stands for "storm" or "darkness", and the Egyptian is also a determinative of words meaning "storm".[1]

8. *The Saltire* has the value *nu*, "not", in Cypriote and in cuneiform. In Egyptian this emblem belongs as a determinative to words expressing contrariety.

9. *The Amulet.*—This is the Egyptian emblem of life (the Ankh), and it was used in Chaldea, but has not been recognised in cuneiform. It occurs also in Phœnicia and at Carthage, and on the Hittite texts. The Cypriote sound *Ra* as a Turanian root might mean "life",[2] from a widely spread root, whence *Er* or *Ar*, "man", and other words meaning "power" or "strength".

10. *Country.*—The emblem represents mountains. In Akkadian *Ma* and *Mat* are words meaning "land", and in Egyptian the emblem occurs with the word *Mata*, signifying some Asiatic country.[3] The Cypriote sound is *Mi.*

11. *The Kteis.*—This emblem appears to be used in Hittite for the pronoun *Mu*, "I". It is very like the cuneiform determinative

[1] This seems, according to Prof. de Lacouperie's list, to be the Chinese emblem *kek* or *mi*, "black" (compare Akkadian *gig* and *mi*, "black").

[2] Compare *Ra*, "to make", *Rag*, "create", in Akkadian and Susian respectively. This identification of the emblem, which has lately been discussed by several scholars, will be found in *Syrian Stone Lore*, 1887, p. 72. It also occurs on a seal found by Mr. Greville Chester, and on a so-called Hittite cylinder (Perrot, *Syrie*, p. 772).

[3] The word *Shan* for mountain, in Chinese, represented originally a three-peaked mountain in profile.

of "female", having among other sounds that of *Muk*.[1] The root *Am Um* in Tartar languages means "mother" and "existence". The Egyptian emblem signifies the female, and is found with the word *Ma* or *Mat*, "mother". The Cypriote sound is *Mo*.

12. *The Phallus* is used in Hittite for the pronoun *Ne*, "he". It appears somewhat to resemble the cuneiform *Na*, which is thought also to represent the phallus. The Cypriote is *Ne*.

13. *Running*.—There is only one known instance in Hittite. The cuneiform *dhu* means "go". There is another similar cuneiform emblem (of which only one case is known), said to mean "stand" or "slave". The Egyptian is a well-known determinative for "walk", "move", "go", occurring in both directions for "go" and "return".

14. *The Foot*.—This is clearly the same as the cuneiform *du*, "go". It is used, however, for the passive of the verb in cuneiform, and apparently in Hittite also.

15. *The Leg*.—This is a distinct emblem, occurring in Hittite on the same texts with 14, but much rarer. The Egyptian emblem is used as a determinative with words meaning "climb", "walk", etc.

16. *The Open Hand*.—Akkadian *se*, "give", and *sa*, "favour". *Su*, "hand" and "favour", from the Tartar root *seu*, "favour". The Egyptian emblem is the determinative for "hand" and "take", and appears to have had the value *sa* or *sap* (*see* Pierret, *Vocab.*, p. 580). The letter *d* is also a hand in Egyptian.

17. *The Arm raised*.—Cuneiform *Id*, "power", and *Da*. The word *Ti*, "take", appears to have the same origin. The Egyptian is the determinative for "give". The cuneiform is used to express the abstract termination *Da*. The Hittite may perhaps also be so used. The Cypriote is *Te*.

18. *The Dog or Lion*.—The Altaic race only found the lion on reaching Mesopotamia. They called it the "big dog", and the emblem on Hittite seals may be a mastiff or a lion. The cuneiform *Ur*, "dog", has been shown by Mr. G. Bertin to be a dog's head. The Egyptian lion-headed goddess also appears cat-headed.

[1] Akkadian *Anna*, "mother", *Mukh*, "to bear", *Ma*, "be"; Chinese *Muk*, "mother"; Turkish *Am*, the Kteis; Tschuwash *Ama* (also in Khitan), "mother", "wife". *Muk* in Akkadian is rendered "building" (*i.e.*, what is made), but the emblem has in cuneiform also the value *sal*, "female", and *Rak* (the Kteis, according to Lenormant), meaning "the creator", and "woman". The meaning of the cuneiform emblem is thus clear, and Herodotus speaks (ii, 102, 106) of monuments on which he saw the Kteis represented in Syria.

19. *The Bull.*—*Le*,[1] *Khar*, *Gut* are Turanian words for bull. In Egyptian we find the two last. The Cypriote is *Le*.

20. *The Sun.*—In both cuneiform and Hittite the sun emblem, originally round, became lozenge-shaped as the system became more conventional. There is a doubtful Cypriote form which might be compared, but the sound is uncertain.

21. *The Ship.*—A Cypriote emblem rare and rather doubtful, with the sound *ma*, might be compared with this.

22. *The Stick.*—The Egyptian is the determinative of causation, and accompanies the word *Ta*, "beat". In Akkadian we find *Da*, "to drive", which is apparently the Tartar *ait*, "to drive".[2]

23. *The Throne.*—In cuneiform *en*, "lord", is symbolised by a throne. The Egyptian throne is the emblem of Isis and of the rising sun. In Hittite the value may have been *en*, and the meaning appears to be "majesty".[3]

24. *The Crook.*—The sound *Ga* in Altaic speech means "curved". The Egyptian emblem *hik* stands for "chief", but the Hittite seems to be used as an adjective or precative Cypriote, *ka*.

25. *The Herb.*—The sound *Ti* signifies "living" in Akkadian. The Egyptian emblem is the determinative for trees or herbs, and accompanies the word *Tai* or *Ti* for "plant". In Medic *Ta* means "live". The Cypriote sound is *Te*.

26. *The Bud.*—The Hittite resembles the flower sceptres borne by Cappadocian and Assyrian deities (and by deities in India as well). The word *pu* signifies "growth". The cuneiform *Pu* is also a bud. The Egyptian emblem *pat* is a sceptre. The Cypriote sound is *Pu*. The Akkadian word *Pu* means "to grow long", the Tartar *boy*, "long" or "grass", the Hungarian *fu*, "grass".

27. *The Rod.*—This is very rare in Hittite. In cuneiform *pa* is rendered by some authorities sceptre, perhaps connected with the Altaic *epte*, "to rule". The meaning of the cuneiform emblem is, however, somewhat doubtful. The Cypriote sound is *Pa*.

[1] *Le* or *lu* is a sound belonging to the bull's head in Akkadian. *Lub* is said to be a Chinese word for "bull". It apparently means "animal", from the root *ol*, "to be". Hence *Lu* is "horse" in Hungarian, and *loo* means "soul" in Zirianian (Akkad. *Lu*, "man" or "being"). In Chinese the bull's head, according to de Lacouperie, has the sound *gut*, "bull".

[2] *Ta*, "great", also occurs in Akkadian, and *Tan*, "power", Chinese *Ta*, "powerful", *Tan*, "hero". This is perhaps the Tartar *iti*, "master". The Finnic root *tan* also means "strong". In Catagaish *tay* means both "prop" and "power". The Cypriote emblem compared is *ta*.

[3] The word *En* for throne recalls the word *Hain* in the Khitan for a sacred throne (*J.R.A.S.*, XIII, ii, p. 162).

28. *The Key.*—The emblem recalls the wooden keys used in Etruria and still in use in the East. The cuneiform *ik* means "open"—a very common Altaic root—and the emblem might also be a key. The Hittite is used apparently as a noun-suffix (*Ke*).

29. *The Cross.*—There is no doubt that the cross was a sacred emblem among Hittites and Cappadocians. It is held in the hands of deities on the seal cylinders. It is worn as a charm by Assyrian kings. The cuneiform cross stands for *Bar*, "to beget", "to prosper", the Tartar *bar*, "to live". The Cypriote sound *lo* may be connected with a Turanian root, "to live", whence "spirit", and Akkadian *Lu*, "man". The Carian H, which has the same form, is perhaps from the word *Hi*, *Khi*, *eii*, meaning "good" in some Altaic languages. All these sounds agree in making the cross (like No. 9, the Amulet) a sign of prosperity.

30. *The Fire Stick.*—This is perhaps uncertain. The Cypriote *Ri* may represent the Turanian root meaning "light", "shine", "burn" (*Yar ör*). In Ugric languages it means "to be red". Akkadian *Ri*, "bright". The cuneiform *Ri*, signifying "bright", in its oldest form resembles the Hittite, but the original emblem is uncertain.

31. *The Yoke.*—In cuneiform the emblem *lu* means "yoke", the Tartar root *il*, *ol*, meaning "to bind together". The Hittite emblem is used to form adjective-adverbs, like the Turkish *lu*, *leh*, *li*, and the Akkadian *li*. The Cypriote sound is *lu*.

32. *The Stream.*—The occurrence of a similar abstract idea in Egyptian in this case is very interesting. In that system the emblem is the determinative for sprinkling and shedding. The Cypriote *Re* connects the Hittite with an old root, *Ra*, "to flow" as in Akkadian (Tartar *Ir*, "to flow").

33. *The Arrow.*—The Tartar root *at* means "to shoot". The cuneiform *Ti* resembles an arrow, though not used for that word. The javelin also occurs in Egyptian. The Cypriote is *Ti*.

34. *The Hook.*[1]—The Tartar root *Böy*, *Bök*, "bent" or "curved", may perhaps explain the Cypriote *Po*. The Egyptian emblem is used as a letter.

35. *Corn.*—Unknown in Hittite, *se* in cuneiform, *so* in Egyptian, stands for corn, and the Cypriote seems to have a similar derivation.[2]

[1] The Chinese emblem *boh* or *pu*, meaning "to divine", according to de Lacouperie, is a sort of hook very like the Hittite.

[2] The Cypriote *o*, *pu*, *te*, *so*, are very like one another, because they were originally "herb", "plant", "growth", and "corn".

36. *The Fish.*—Unknown in Hittite. The cuneiform *Kha* means "fish". The Cypriote *Khe* may preserve the later form of the Hittite. The Egyptian word *Kha*, "fish", has the determinative a fish.

37. *The Eye.*—This is unknown in Hittite, unless the ordinary emblem, *An*, for "deity, be so derived, in which case it would also have the value *Is* or *Si*, which is quite possible, as *Es* is a common Tartar word for "God". In Akkadian (as in Chinese) *Si* stands for "eye" or "see".[1] In Egyptian the emblem shown accompanies the words *An* and *Sai*, for "eye" and "see". A somewhat similar eye is also used for the "eye of Osiris", which was an amulet, and symbolised the sun. The Cypriote sound is *Si*.

38. The Hittite emblem occurs only on one seal. The cuneiform probably means "to stand still". The Egyptian is the emblem of "stability" (*Tat*), a word also apparently found in many Tartar dialects.

39. The value *Dim* is obtained for the Hittite from the bilingual. The cuneiform *Dim* means, among other things, "to make" or "produce" (Tartar, *Dem*, "breath" or "life"). The emblem has been thought to be Phallic.

40. The Hittite resembles an altar, and is compared with the altar emblem in the other systems. Its sound in Hittite is still unknown.

41. *The Wind.*—The cuneiform *Zi*, meaning "life" or "spirit", is very like the Hittite, which derives its sound from the Cypriote, rendered variously *Zu*, *Se*, or *Ze*. The Tartar root *Is*, meaning "blow," "spirit", may be connected.[2]

42. *Plural.*—Represented in all three systems by strokes. In Hittite this emblem is known from the bilingual to have the value *Me*, which is the Elamite and Akkadian plural according to Professor Sayce.

43. *Speech.*—The value of the Hittite is generally acknowledged. The sound *Ni* is to be compared with the Tartar *On*, "call", and the Medic *Na*, "to say", Turkish, *aun*, "voice", Akkadian, *En*, "a prayer". The Egyptian is the determinative of speech.

44. *Twins.*—Only once known in Hittite. The Egyptian emblem is used to express "union". In Hittite it may mean the twins (Bel and Sin) who found their place in the Zodiac (the

[1] The Chinese *eye* emblem has the sounds *si* and *mut*, according to de Lacouperie.

[2] The Chinese emblem for "breath" or "wind" presents a remarkable resemblance.

Aryan Asvinau), since the emblem occurs in what seems to be a list of divine names.[1]

The reader must judge for himself the value of these comparisons. I have only to say that not by *form* alone are they suggested, but by meaning, and in some cases by *sound* as well. To me they appear to give strong confirmation of the theory of a common origin for the three hieroglyphic systems.

The subject of the connection of the Chinese writing has not been treated in this paper. It presents peculiar difficulties, because of the decayed state of even the earliest known symbols. There are, perhaps, some forty possible comparisons known, but the Chinese seem to have developed independently from a very early period. Some advance in tracing the earliest forms has been made by Dr. Chalmers, and the subject has been studied by Edkins, de Lacouperie, and other scholars, but the results are still very doubtful in most instances.

C. R. CONDER.

[1] There are several other cases which might be added. The eagle, the hare, the ass's head (which latter occurs in all three systems), the vase, *Khi* or *Pe*, found in Hittite and in cuneiform, and resembling the Egyptian *Khai*, a "vase". The bowl—*Tin* in cuneiform, *Tenni* in Egyptian—the tablet, and the demon's head, the former in all three systems, the latter in Hittite (in Egyptian the demon *Smau* is a full figure). But in these seven additional cases the connection is almost purely graphic. There are also a few cases where cuneiform and Egyptian emblems, not occurring in Hittite, may be compared.

NOTES FROM PARLIAMENTARY PAPERS.

No. 6.

REPORT BY MR. F. S. A. BOURNE OF A JOURNEY IN SOUTH-WESTERN CHINA, through the Provinces of Ssŭ-ch'uan, Yün-nan, Kwang-si, and Kuei-chou, from October 26th, 1885, to May 5th, 1886.

(Continued from page 67.)

YANG-LAN-CH'UNG TO LÉ-NGAN.—Ta-shih-yais, a most picturesque valley, or, rather, little plain, shut in by limestone hills of most fantastic shape. The whole surface was planted out in little beds of poppies, with here and there a patch of buckwheat in flower, the whole as clean and regular as mosaic. This pretty little nook was made more interesting from the fact of its being inhabited by a tribe whom the Chinese call Lung-jên, cheery, open-faced people, with whom it was a pleasure to talk; the men dressed as Chinese, but the women in a costume not seen before. In the house where I had breakfast there was a little girl, who looked as if she had stepped out of a Christmas card, dressed in red and black skirt and black tunic, with silver buttons and red cuffs. As her feet were bare, I asked her father whether she ever wore shoes; but, before he had time to answer, a pair of red embroidered shoes came flying through the door of the women's quarters—an impulsive movement, meant, no doubt, to express maternal indignation at such a question. These excellent Shans, for so Vocabulary Shan No. 2 shows them to be, were troubled in mind by a proclamation just issued by the Governor-General Ts'ên, ordering them, or rather their wives and daughters, to adopt the Chinese dress. They were of the opinion, they said, that everyone should be allowed to follow his own religion ("chiao"); theirs was that women should dress in tunics and skirts, and not in sacks and trousers.

Ma-t'ang to K'ai-hua Fu.—About two miles out of Ma-t'ang, at 7 A.M., we were interested to see an altar (small wooden table with covering of red cotton) erected by the side of the road, with a carpet of fir branches, candles burning, and three men standing up behind it, evidently waiting to go through some ceremony; but we were greatly astonished when they threw themselves down and "kotowed" to me as I came up. It turned out that they were

Shans who had heard me talking in the inn over-night about their language and their relatives the Tai, and who had thought the present performance would be a neat thing in worship, as perhaps I might intercede with the Governor-General at K'ai-hua in the matter of the dress question.

Part V.—K'ai-hua Fu to Nanning Fu.

Chiao-chih Ch'êng to A-chi.—Most of the inhabitants of this part belong to the P'u-la tribe, who are no doubt Lolos (*see* Lolo Vocabulary No. 9), or to the Lung-jên Shans.

A-chi to A-chi-tê.—About half-way, at a place named Tiao-ching, I met some people called Sha-jên by the Chinese, and said to belong to the same family as the Lung-jên. They are no doubt Shans (*see* Shan Vocabulary No. 3). In the *Topography* the Sha-jên are said to be the descendants of an Annamese chieftain named Sha, and to have settled in these parts in the thirteenth century. At this place I noticed a proclamation just issued forbidding lynch law. The unauthorised punishments specified were burning, drowning, burying alive, and suspending by a hook at the top of a pole. The last manner of lynching is the common punishment in Yün-nan for stealing standing crops.

At a place called Pai-ni-t'ang, about four miles from A-chi-tê, I met a specimen of a tribe called T'u-lao by the Chinese, and Pu-tai by themselves. I discovered afterwards that Pu is a Shan word meaning grandfather or grandson, and used in this and similar names of tribes with the meaning of clan in Clan Stuart, for instance. Pu-tai means Clan Tai—people who are, or are supposed to be, descended from Tai as common ancestor. Shan No. 4 is the vocabulary taken on this occasion. There were Lolos in this same village speaking a dialect identical with Lolo No. 9.

Kuang-nan Fu to *Sha-mu-ch'iao.*—The road from Kuang-nan leads over low mounds bare of trees and houses. At last, after a walk of five miles, we came to a guard-house, or rather shed, occupied by three men with rusty tower muskets, where we had breakfast. From this point on to the end of the stage is said to have been the scene of a great struggle in the eleventh century.

According to the version of the local population, who are all Shans, the Lolos were attacked and defeated here, after a tremendous struggle, by a Chinese general named Yang, who is worshipped by all the country-side, an ox being sacrificed to him every three years. At the end of the battle the chief of the Lung-jên was

taken up to heaven. A large block of stone which we passed on the right hand of the road was said to have been a huge fish which Yang had brought up from Po-sê to fend off the arrows of the enemy. It had been turned into a block of limestone, as Yang himself had been—there he stood in a cave on the opposite side, wearing a straw hat. So said my escort; and they explained the general's winning the battle after he had been turned into stone, by the fact that there were six brothers Yang—one as good as another. Yang had only to sow beans, and soldiers sprang up. There must be a vivid tradition about this hero, for the local members of our party talked of nothing else all the stage. Beyond the boulder and the stone man there is a fortified work in the hills in which the hero is said once to have taken refuge.

This tradition has evidently a basis of fact, although the above version is very far from the truth, for in the *Topography*, under the head of "Non-official Worship", it is written :—

"To the north-west of the city of Kuang-nan there is a temple to Yang Wên-kuang, who was a general under Ti Ch'ing of the Sung dynasty, and who pursued Nung Chih-kao as far as this. Posterity worshipped him." Under the heading "Ancient Remains", the *Topography* says :

"On the north of Kuang-nan Fu there is the impression on the rock of a horse's hoof, which tradition declares to be that of the horse of Nung Chih-kao as he fled from his defeat by Ti Ch'ing of the Sung dynasty." Again, under the heading of "Inscriptions" :

"Forty li from (?) Hsin-ngan-so in Mêng tzŭ Hsien there is an old stone with the following inscription : "The Sung General Yang Wên-kuang was encamped here, to wit, while Ti Ch'ing was campaigning against Nung Chih-koa." Again, under the heading of "Hills and Streams" :

"The hill named K'ê-yen is 70 li to the north of the city of Kuang-nan Fu. Tradition affirms that the Sung general Ti Ch'ing pursued Nung Chih-kao as far as this." Then follows a note by a scholiast of the orthodox type, whose object is to show, with regard to the hoof impression, that Nung Chih-kao, having been a rebel, it cannot be the mark of his horse's hoof, which heaven would not have preserved, and must therefore be the mark of the hoof of one of the Imperialist soldiers that served under Ti Ch'ing against Nung ; but by the way he gives us valuable facts, as that Ti Ch'ing was a Chinese Imperialist general ; that the contest took place in 1053 A.D. ; that Nung Chih-kao was a rebel man (barbarian) of the district now called Nanning Fu in Southern

Kwang-si ; that, after his defeat, Nung Chih-kao escaped into the territory of the Ta-li kingdom, now Ta-li Fu, by which state he was killed ; that his mother, named A-nung, his brother, and his two sons were sent to the capital in cages and killed in the market-place. Again, under the heading " History of Government" (Yen-kê), the *Topography* says :

" After Ti Ch'ing had defeated Nung Chih-kao in 1053 A.D., the descendants of the latter settled in Kuang-nan Fu."

Now, there is no doubt whatever that the Nung-jên, or Pu-nong, as they call themselves, the tribe to which Nung Chih-kao belonged, are Shans, as are nine-tenths of the population of the Nanning prefecture. In fact, what happened was, that the Shan chieftain, Nung Chih-kao, whose home was in the modern Nanning, sustained a crushing defeat in this neighbourhood at the hands of Yang Wên-kuang, a lieutenant of the Sung Imperialist general Ti Ch'ing, in the year 1053 A.D. In fact, for a moment the curtain rises, and we get a glimpse of the struggle between the Chinese and the vigorous Shan race for the possession of Southern China.

Between the city of Kuang-nan Fu and the Kuang-si border the whole country population is Shan. The Chinese call them " t'u-jên", aborigines. Asked in Chinese where they come from, they describe themselves as " k'ê-chia" (immigrant families); Hakkas, and say that their ancestors came, many generations back, from Hunan or Nanking, or some such high-toned locality ; but their speech bewrayeth them, for, with their women, they speak a dialect of which Shan No. 5 is a specimen, and admit to the inquirer, who can speak a few Shan words, that they call themselves Pu-nong, Pu-chei, or Pu-tai in their own language. Respecting themselves as Chinese, they profess to worship the Chinese general who defeated their chieftain in the eleventh century. However, their narrative reveals their secret sympathies : the Lolos are introduced as the defeated party ; the Pu-nong chieftain is taken up to heaven, although, on their own showing, it is not clear what he had to do with the affair ; and the Chinese general has to bring up a fish to fend off arrows, and is turned into stone.

Hsi-yang to Liu-k'ung-t'ang.—At Liu-k'ung-t'ang we stayed in the house of an amusing Shan family, who called themselves " k'ê-chia", as usual, consisting of grandfather, grandmother, father, mother, and four children. The grandmother sat all day on a straw hassock, wearing heavy silver bracelets and necklace, gave orders, gossiped with the neighbours, and held consultations on business matters ; the wife and a daughter, aged

seven, did all the work, as usual in Shan families; the grandfather pottered about, spending most of his time upstairs in a loft, surveying a long row of bacon; and the father did nothing, and made the house resound for half-an-hour with his complaints when asked to fetch a bucket of water. The Liu-k'ung-t'ang villagers worship a grove of trees.

Liu-k'ung-t'ang to Chê-lang.—Our road to-day lies along a lovely stream about twenty yards broad, which, about seven miles from Liu-k'ung-t'ang, breaks into a striking waterfall, with five separate cascades one above another.

All along this road "t'u-jên" or "tu-chia", as the Chinese call them, are very numerous. They call themselves "k'ê-chia" in Chinese, and will give, if pressed, the exact town and street from which their ancestors came generations ago. To-day, at a village called La-ssŭ-t'ang, about seven miles from Chê-lang, I went into one of their houses out of the rain, and found a meeting going on to consider measures to recover two buffaloes that had been stolen the night before. None of the women could speak Chinese. I had not my papers with me, and could only obtain a short vocabulary, but enough to show that these people are Shans. The house was a regular Shan house, with a lower room for domestic animals, and a living room above, with floor and walls of bamboo laths.

Chê-lang to Ssŭ-t'ing.—Six miles south-east of Chê-lang is situated Fu-chou, the place from which the magistrate referred to below takes his name.

At Ssŭ-t'ing, a wild-looking individual passed the door of the inn while I was talking to the landlord, who said he was a "Hua Lolo" (coloured clothes Lolo): *see* Lolo Vocabulary No. 10, taken from him. He was the last Lolo I met; there are few of them here—mere stragglers amongst a Shan population. This was a degenerate specimen of the race. He had no knowledge of Lolo writing, nor of ancestor worship. One curious custom he mentioned—the women of his tribe are forbidden to eat pork; the animal was considered unclean, and therefore women should not eat it; men's eating it did not matter. Thus to reconcile the claims of ham with the demands of a strict morality reveals a masculine judgment that all men must admire.

At Kuei-ch'ao, the most considerable place between Kuang-nan and Po-sê, resides an official known as the Fu-chou Aboriginal Magistrate (Fu-chou t'u Chih-chou), who rules over the district between Kuang-nan Fu and the border of Kwang-si, an area of something like 2,400 square miles. This is the first instance I

have come across of a description of civil appointment which takes one back before the days of competitive examination. This office is hereditary in a Chinese family, named Shên, that came originally from the province of Chê-kiang. It seems that before China had conquered this part, Chinese families migrated outside the border of China's settled rule, and that the most considerable of these families received commissions from the Emperor of China as lords of their neighbourhood. The appointment of aboriginal chiefs (T'u-ssŭ) is common all over South-west China; in that case the natural head of the clan is made responsible by the conqueror for the good behaviour of his people; but the nature of the present appointment is very different, and points rather to a time when the Chinese were colonising this region, and when it was sought to have some hold over a scattered border population of emigrants. There are few of these appointments in Yün-nan except on the Shan border; but a large part of south-west Kwang-si Shan country is governed in this way.

The expression "k'ê-chia" (Hakka), immigrant, is applied to Chinese in these parts, and never to Shans as Shans, and they never predicate it of themselves except when they wish to be considered Chinese. Chinese is often called "k'ê-hua", language of the immigrants.

Po-sê to Nanning Fu.—If I remember right, Mr. Colquhoun, in the account of his journey in these parts, remarks that his servant returned from a Yamên at Nanning, and said that he had there heard people talking in a strange tongue. Of the three runners sent to look after me by the magistrate, two were Shans, and Shan No. 6 is a vocabulary taken from one of them. The Shan language is here called Chuang (hua) by the Chinese, a name of which I could get no account.

Part VI.—Nanning Fu to Kuei-yang Fu.

At a village named Lung-kuang, about seven miles from Huai-lung, I met a Chinese gentleman named Lao, whose father had studied English at Canton, and had been prefect of Wu-ch'ang Fu (Hankow). His father had moved here from Canton, and was recently dead. I saw some of his English books, in one of which was written "Lao Pao-lien, 1864". The son told me that the Shans ("t'u-jên") had here no independent script of their own, but that they employed Chinese characters with alterations and additions to represent their own sounds, being able in this way

to write essays in their own vernacular, after the pattern of Chinese competitive essays. He was kind enough to borrow a specimen of this writing for me to look at. More than ten per cent. of the characters were altered from the Chinese forms. I had to return this MS., but the one obtained at Li-po Hsien is probably a writing of this description.

Hsin-ch'êng is the seat of an hereditary Shan magistrate named Mo, whose ancestors originally came from the Kiang-su Province. The population is Shan, with a mixture of Chinese. Shan No. 7 shows the language spoken here ; it was taken from our landlord.

Li-po Hsien is situated in a low-lying valley (1,460) traversed by a branch of the Lung River, here about 60 yards broad, but very shallow, and not navigable. South of the town it is said to follow a subterranean passage for seven or eight miles.

The inhabitants of the Li-po district are for the most part Shui-chia, *i.e.*, Shui families, as the Chinese call them, who are said to have moved up from Kwang-si. The men wear the Chinese dress, but the women a pleated petticoat, their hair being done in a sort of knot.

Vocabulary Shan No. 9 was taken from an intelligent Shui-chia. They call themselves Pu-shai. From the same man I obtained a MS. in their writing, which is now in the British Museum. It is probable that this script is merely an altered form of Chinese.

The Shui-chia are an illiterate people in Chinese. There are said only to have been two Chü-jên ("provincial graduates") from Li-po Hsien during the present dynasty.

Fang-ts'un, the next stage, is a village beautifully situated on the slope of an open vale, with an extensive prospect over well-wooded hills and verdant hollows, the young leaves of the poplar contrasting well with the deep green of the firs. From this point on opium is the great crop. It is carried down into Kwang-si for sale by parties of porters often 100 strong.

At the inn at Fang-ts'un the eldest son, about 10 years of age, was charged with the religious duties, which were of a practical character. At dusk he lighted ten sticks of incense, of which six went to the tablet, to heaven, earth, the emperor, ancestors, and teachers, which is found in every Chinese house however humble ; two to the local gods of virtue and prosperity ; one was stuck in the ground outside the door for the god of the soil, and one was placed in a niche near the fireplace for the kitchen god. He then rang a bell, to call the attention of these dignitaries to the respect

that was being paid them. A worship of this sort may be called natural religion, if natural means what most men do or have done. This worship of natural objects personified and of ancestors is the fundamental religion of the Chinese and of the other races that inhabit China. There is often a veneer of Buddhism or Christianity or orthodox rationalism, but this primitive worship is always below.

Tu-shan Chou is the busiest place we have passed since Huai-yuan Chên in Kwang-si. The majority of the population are people called Chung-chia (Chung families) by the Chinese, and are said to have migrated into these parts from Kwang-si during the reign of Yung-chêng (1723-36). They are an industrious, thriving people, who have adopted Chinese dress, and have the full rights of Chinese citizenship. Many of them have obtained high places in the competitions and distinguished rank as officials. Their women have given up their clan dress for fifty years, and there is nothing left to distinguish them from Chinese but their language. Shan Vocabulary No. 10 was taken from a very intelligent Chung-chia. He disclaimed all relation with the Shui-chia, said that he could not understand their speech, and claimed to be descended from Chinese immigrants from Kiang-nan, in accordance with the infatuation which makes all the Shans try to pass themselves off as Chinese. However, when he found that I knew some words of his clan speech, he gave up disguise, and confessed that the Chung-chia called themselves Pu-man. The vocabulary shows a very close agreement with No. 7, taken from a Pu-man in Kwang-si, and is closely related to the Pu-nong of Yün-nan. It is probable that the Chung-chia are more recent arrivals than the Shui-chia. I could get no reason why the Chinese call them Chung. They extend as far north as Kuei-yang Fu.

The province of Kuei-chou has been for ages the battle-field between the Chinese and the third non-Chinese race of Southern China—the Miao-tzŭ—who are the ancient lords of the soil of Kuei-chou and Western Hunan. The tribes of Miao-tzŭ are designated by the Chinese, in their usual unintelligent manner, as black ("hei miao"), party-coloured ("hua miao"), etc., epithets derived from their tribal costumes. With sword and bow or native musket they seem to have been man for man in their own hills a match for the Chinese, to whom they have been a source of anxiety before and since the time of K'ung-ming (A.D. 181-234), who affirmed of them that it was their nature to rebel in a small way ("hsiao fan") every three years, and to rebel seriously ("ta fan")

every six years ; but foreign fire-arms wrought great havoc amongst them, when the rebellion was stamped out between 1868 and 1872, and, being in every way, except perhaps with bow and sword, inferior to the Chinese, they are never likely to be formidable again. I came across few Miao-tzŭ, for they are shy, and keep off the main road ; but those I saw struck me as the worst-featured tribe in Southern China. To study their tribal relations, one should pay a visit to Ku Chou or Pa-chai, in south-east Kuei-chou, where they are very numerous. The most important tribe seems to be the Hei Miao, who call themselves "Phŏ", a vocabulary of whose speech will be found in the Appendix, taken from a native of Huang-p'ing Chou in the south-east of the province.

There is probably no family of the human race—certainly no family with such claims to consideration—of which so little is accurately known as of the non-Chinese races of Southern China. This is in great measure due to the perfect maze of senseless names, taken from the Chinese, in which the subject is involved. In the *Topography of the Yün-nan Province* (edition of 1836) there is a catalogue of 141 classes of aborigines, each with a separate name and illustration, without any attempt to arrive at a broader classification.

It appeared to the writer that, before these tribes could be scientifically assigned by ethnologists, they must be reduced to order amongst themselves, and that something might be done in that direction by taking upon this journey a short vocabulary, and obtaining its equivalent in the dialect of every tribe met, when a comparison would reveal affinities and differences. The twenty-two vocabularies that follow are the result. A comparison of these vocabularies and a study of Chinese books (especially the *Yün-nan Topography*) has led to the conviction that, exclusive of the Thibetans (including Si-fan and Ku-tsung), there are but three great non-Chinese races in Southern China : the Lolo, the Shan, and the Miao-tzŭ.

The vocabularies do not convey the whole evidence that these scattered peoples respectively speak the same language. In the case of the Lolo there was the unmistakable Welsh aspirated *l*, and the aspirated *v* in "vha" (pig)—strange sounds, unheard except from Lolo. Again, the Pĕrma at Ssŭ-mao, when asked by what name his people knew that town, replied, "By the same name as the Chinese"; and when asked what "Ssŭ-mao" meant in his language, replied, "'Ssŭ' means 'blood', and 'mao' means 'old'." I

happened to have Mr. Baber's *Lolo Vocabulary* open on the table, and looking up those words, found "blood", "ssŭ", and "old", "mu", *i.e.*, "Ssŭ-mu." Lolo, Shan, and Miao-tzŭ are all languages of the Chinese type that make up for poverty of sounds by "tones", and to an ear accustomed to these distinctions of sound, "song" and "sam", the second and third numerals, and "ma" (dog), in Shan for instance, are much more significant when heard than written in English, when the similarity of tone is lost.

In the *Yün-nan Topography* (1836) are printed short vocabularies of the principal dialects spoken by foreign tribes in the Yünnan Province. The following are the dialects given: Ts'uan-man, I of Tung-ch'uan Fu, Nung-jên, Pai-i, T'u-lao, A-ch'êng, Hei-sha-jên, I of Li-chiang Fu, and Burmese (the last with Burmese characters). The following table shows the sounds given for "two", "three", "heaven", and "water":—

Name of Tribe.	Two.	Three.	Heaven.	Water.
(*? Lolo.*)				
Ts'uan-man	ni	sa	mu	i
I of Tung-ch'uan Fu	ni	sê	mu	i
A-ch'êng	nêng	ssŭ	nü	i-chieh
I of Li-chiang Fu	ni	hsü	mei	cho
(*? Shan.*)				
Nung-jên	sung	san	fa	nan
Pai-i	suan	sang	fa	nan
T'u-lao	sung	san	wo	nan
Hei-sha-jên	sung	san	po-pên	lan

Although these sounds are imperfectly conveyed through the clumsy medium of Chinese characters, the dialects are clearly divisible into Lolo and Shan. The Burmese sounds for "two", "three", and "water" are not given, but some that are given show a curious resemblance to Lolo sounds, *e.g.*, "la" (hand), "mou" (heaven), "ni" (sun), "ch'ih (sheep), and "shui" (gold).

Again, among the 141 tribes given in the *Topography* there are very few indeed, and those only the shortly-described and unimportant, which cannot be identified from illustrations or letterpress as belonging to the Thibetan (including Si-fan and Ku-tsung), Lolo, Shan, or Miao-tzŭ families. There are one or two that may be either Lolo or Si-fan, but these two families seem somewhat closely related.

To make what follows clear, something must be said about nomenclature. In Chinese the more general terms for foreigner (contemptuous) or barbarian are "I", "Fan", and "Man" ("Man-

tzŭ"), the last term meaning more exactly "barbarian of the south". "Lolo" is a Chinese corruption of "Lu-lu", the name of a former chieftain of the people who call themselves "Nersu", and has come to stand for that people. "Shan" is the Burmese term adopted by Europeans for the people that call themselves "Tai", "Pu-nong", etc. "Miao-tzŭ", a Chinese word meaning "roots", is confined by the more accurate to the aborigines of Kuei-chou and Western Hu-nan. "T'u-fan" seems to stand sometimes for "Lolo" and sometimes for "Si-fan".

Lolo.

The old Chinese name for this race was "Ts'uan Man"—"Ts'uan barbarians"—a name taken from one of their chiefs. The *Topography* says:

"The name of 'Ts'uan Man' is a very ancient one, and originally the tribes of Ts'uan were very numerous. There was that called 'Lu-lu Man', for instance, now improperly called 'Lo-lo'.

These people call themselves "Nersu", and the vocabularies show that they stretch in scattered communities as far as Ssŭ-mao, and along the whole southern border of Yün-nan. It appears from the *Topography* that they are found also on the Burmese border, for under the heading of "Ts'uan Man" an extract is given from the *Topography of T'êng-yüeh Chou* (Momein) as follows:

"The old Ts'uan of Mêng-shan do not die. When old, they grow tails, eat men, not distinguishing their own children; love the hills and fear the abodes of men, and run as strongly as wild beasts. The natives call them autumn foxes. But, still, they are not invariably to be found."

This is nonsense, but it shows that there are Lolo on the Burmese border.

Where the Lolo came from is not yet known, but of their present habitat it is possible to get an idea. In the great bend of Yang-tzŭ, in 103° east longitude, between that river and the An-ning River, the Lolo are at home; there they live independent of China, under their own tribal chiefs and aristocracy—the "black bones" of Mr. Baber's fascinating description. Thence they extend in a scattered manner as far north as Wên-ch'uan Hsien, in latitude 31° 15′, longitude 100° 30′ east, whence a Welsh missionary has sent me "llu-sweh" (*ll* as in Welsh) as their local sound for "moon". To the west they extend to the Mekhong. To the south they are found occupying here and there the higher ground, until the plateau breaks into the plain. To the east they are found as far as Kuei-

yang Fu. They seem to be more numerous as Ta-liang Shan, their present home, is approached, and they form much the largest part of the population in North-eastern Yün-nan and North-western Kuei-chou. Their tribes are known to the Chinese under the following names: Ts'uan, Wu or Pai Man, Man-tzŭ, I-jên, I-chia, Tung-ch'uan, Li-chiang, Han, Kan or Shui I, A-ch'ê, A-ch'êng, Hei, Pai, Miao, Hai, Kan, Sa-mi, A-chê, Lu-wu, Sa-wan, A-hê, P'u-la, Hua, Ta or Hsiao Lolo, P'u-t'ê, Woni (Ha-ni), Ma-hê, Pu-tu, Li-hsieh, Nieh-su, and K'a-to.

Shan.

It appears from the *Yün-nan Topography* that "P'o" is an ancient generic term for this race. "P'o I, otherwise Pai I, were incorporated with China at the beginning of the Yuan Dynasty (1206 A.D.). Their country was situated on the borders of Burmah and Ch'ê-li. They are now found all over the south-west of the province" (mentions fifteen prefectures). It seems that to the same race belonged the ancient kingdoms of the Ai-lao, of Nan-chao (now Ching-tung), and Pai Kuo (now Ta-li).

The Shan are not found north-east of Yün-nan Fu. The first we came across was at Yuan-chiang Chou. But they are found at the lower levels all along the south Yün-nan border, and from Kwang-nan Fu along our route to the border of Kuei-chou they form almost the whole population. They must have been masters of Kwang-si before the Chinese, for the Chên-t'ai's Yamên at Nan-ning and the Examination-hall at Kuei-lin are said to have been built upon the sites of Shan palaces.

It would be interesting to know how the Shan reached Kwang-si, whether through Tonquin or across the Yün-nan plateau. The Shan in southern Kuei-chou are undoubtedly immigrants from Kwang-si, and did not cross the plateau. It is curious that the late Roman Catholic Bishop of Kuei-chou, Mgr. Albrand, who had formerly been a missionary in Northern Burmah, often remarked the resemblance between the Shan speech and that of the Chung-chia; but, according to Père Bodinier, the Bishop's knowledge died with him.

The Shan language is softer than Chinese or Lolo, with fewer gutturals and aspirates, and appears easy to learn. The numerals show a curious resemblance in sound to the Cantonese.

The Shan call themselves Tai, Pu-tai, Pu-nong (or nung), Pu-man, Pu-jü, Pu-chei, Pu-ên, Pu-yiei, and Pu-shui. Their tribes are

called by the Chinese P'o, Pa or Pai I,[1] Shui Han or Hua Pai I, Pai-jên, T'u-jên, P'u-man, Pai, Hei or Hua T'u-lao, Nung or Lung Jên, Sha-jên, Hei or Pai Sha-jên, Min-chia, Shui-chia, Chung-chia, and Yao-jên.

Miao-tzŭ.

In Part I, I omitted to mention that at a market-town named Pai-ai, passed on the 10th November 1885, the day before reaching Pi-chieh Hsien, we met a number of "Hua Miao" (party-coloured Miao-tzŭ), so called from their dress, from one of whom I obtained a short vocabulary (Miao-tzŭ No. 1). It was market-day, and there was so much confusion and shouting that I could only get a few words with the man. He told me that his people did not pray to Buddha, but worshipped in the heart before eating.

In the "Hei Miao" (black-clothed Miao-tzŭ) dialect there are said to be eight "tones".

From a book named *Miao-fang-pei-lan (Guide to the Miao-tzŭ Country)*, and the Miao-tzŭ vocabularies taken by Messrs. Parker and Hosie, I gather that the Miao-tzŭ are divided into a number of tribes speaking dialects of one language, which is of the Chinese sort. They occupy at present Eastern Kuei-chou and Western Hu-nan, being very numerous around Ku-chou and Pa-chai, in the south-east of Kuei-chou. They are known to the Chinese by a multitude of names, but always with the affix "Miao", as Hei, Hua, or Ya-ch'üo (black, party-coloured, or magpie Miao).

In the following vocabularies Sir Thomas Wade's system of spelling has been followed, with a few necessary additions.

[1] Several different Chinese characters are made to stand for this sound, which is, according to the *Topography*, merely a clumsy attempt at "P'o". This "Pai I", meaning Shan, must be carefully distinguished from "Pai I", an abbreviation of "Pai I-chia" (white-clothed) Lolo. The character is often the same, *i.e.*, "pai" (white); but in the former case it is used for its sound, and in the latter for its sense.

I. Vocabularies (? Lolo).

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Date	Nov. 12, 1885.	Nov. 23, 1885.	Jan. 6, 1886.	Jan. 11, 1886.	Jan. 13, 1886.	Jan. 18, 1886.	Jan. 27, 1886.	Feb. 7, 1886.	Feb. 14, 1886.	Feb. 23, 1886.
Place	Ta-chê-p'ing	T'ang-t'ang	Ssŭ-mao	Ssŭ-mao	Na-k'u-li	Shên-kou	Kao-po	So-shao-pa	Pu-piao	Ssŭ-t'ing
Called themselves ..	Nersu	Nersu	Na-su	Ha-ni	Ha-ni	K'a-to	Nersu	P'o'rh	P'o-lo	Mêng-pa
Called by the Chinese	I-jên, I-chia, or Lolo	I'jên, I-chia, or Lolo	Lolo	Ma-hê	Pu-tu	K'a-to	Lolo	P'u-la	P'u-la	Hua Lolo
Call the Chinese ..	Sha-pu	Sha-p'u	Ts'a-gor	A-ha	P'i-ni	A-ha	..	Lai-gi	T'o-ni	Dieh-pa
1	t'a	k'a	t'i	t'i	t'i	t'ou	t'i	t'a	ta	ta
2	ni	ni	ên	ni	ni	nieh	ni	ên	nai	nieh
3	ssŭ	ssŭ	sa	su	san	hsi	sa	sa	si	sung
4	t'i	thi	thli	li	li[3]	li	thli	thli	lai[4]	lei
5	u	'u	or	ai	lou[4]	ngê	ngo	ngar	ê	ngar
6	ch'üeh	ch'üeh	ch'u	k'ou[3]	k'ou[3]	ch'üo	ch'u	ch'u	ch'iu	ku
7	hsi	hsi	shih	shih	shi	shih	shih	hsi	hsi	hei
8	'hei	'hei	'hi	hei	hei	hieh	hei	ei	hai[4]	hsi
9	kê	chü	ker	wu	o	chi	k'er	ku	ker	kou
10	ts'u	ts'ê[4]	ts'ê	ts'ê	ts'ê	ts'ê	ts'er	ts'ê	ts'ê	sei[2]
11	t'su-t'i	ts'u t'i	ts'ê-ti	..	..	..	..	ts'ê-t'i	ts'ê-tai	sei-ta
12	ts'u-ni	ts'u-ni	ts'ê-n	..	..	..	..	ts-ên	ts'ê-nai	..
20	ni-ts'u	ni-tsor	ên-ts'ê	ni-ts'ê	..	..	..	ên-ts'ê	nai-ts'ê	nieh-sei
30	ssŭ-ts'u	sê-tsor	sa-ts'ê	su-ts'ê	..	..	..	.	..	..
100	t'a hung	t'a hor	t'i hu	t'i ha	..	t'ou hsiao	..	..	ta hor	ta sha
1000	t'a mi	t'a tu[2]	t'i to	t'i t'u	..	..	..	..	ta chai	ta tiu
Father	ha-pa	p'u-mo, a-ap	a-tieh	a-p'a	a-pa	a-po	..	a-ba	a-ba	pa
Mother	a-ma	A-ma	a-mu	a-ma	a-ma	a-mo	..	a-ma	a-mei	ma
Brother	ni-pa	ni-ka	ner-chieh	a-ni	a-ni	ni-chih	..	a-mo	ni-mo	whi
Sister	ha-nu	mün nor	mu-ler	ni-nu	a-ni	ni-mo	..	a-ni	a-nei	nieh-ma
Head	ung-kê	u-kuor	êm-ger	wu-tu[2]	tu	wu-ch'in	..	ed-der	ê-ku	ma[2]
Hand	..	la[3]	lei	a-la	a-la	a-la	..	ler	lo-po	la
Foot	t'u-ch'ieh	ch'i-ngor	..	..	..	..	..	t'a-ch'i	..	k'ei
Heaven	p'u-mo	mü, p'u-mo	mer (nasal)	wo[4]	u	mi-t'a	..	mŭhr	mehr (nasal)	ta-mo
Sun	nu-chieh	ni	nēr-je-mo	nu-ma	nu-ma	ni-mo	..	egg-gi-ma	jieh-mo	mo-pei
Moon	lu-pu	lo-por	hu-bu-mo	ba-th'a	po-sou	p'o-ho	..	la-ba-ma	la-bo	la-pa
Fire	um-to	mu-tor	ma-tu	mi-tsa	lu-pa	mi-tso	..	mi-to	mi-tu	mi
Water	yi-chüeh	ngyi-ch'ih	yi-jieh	or-ch'er	wu-ch'üo	i-tsa	..	i-jieh	na[4]	zi
Dog	ch'üeh	ch'i	ch'i	a-k'ü	a-k'ü	k'er	..	ch'i	ch'ieh	k'ur
Pig	vha	vha	vhēr	ai-rah	ma-ya	vwa	..	vēr	vo	vha
Horse	mu	mu	mo	a-mu	a-mo	meu	..	mo	mhu[3]	mo
Goat	..	ch'ih[3]	a-ch'i	a-ch'i	a-ch'i	ch'ih	..	ch'ih	ch'ai-mai	tsi
Iron	hou-po[2]	hou-po[2]	hsieh	shu	shu	hsi	..	ti-mieh	hu	hêm[2]
Copper	..	ji	ji	kŭr	gü	..	..	mieh	to	kei
Silver	t'u[3]	t'u	t'u	sheh	fu-ch'ieh	pieu	..	khlor	p'i	p'iu[2]
Gold	..	shê	sheh	fu-sheh	fu-shü	..	..	shê	hsi	hui-p'iu

2. Vocabularies (? Shan).

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Date	Jan. 10, 1886.	Feb. 8, 1886.	Feb. 15, 1886.	Feb. 15, 1886.	Feb. 22, 1886.	Mar. 13, 1886.	Mar. 25, 1886.	April 2, 1886.	April 5, 1886.	April 9, 1886.
Place	Ssŭ-mao	Ta-shih-ya	Tiao-ching	Pai-ni-t'ang	La-ssŭ-t'ang	Nan-ning Fu	Hsin-ch'êng	Yao-mêng	Li-po Hsien	Tu-shan Chou
Called themselves ..	Tai[3]	Pu-nong	..	Pu tai	Pu-chei	Pu-ên	Pu-man	Pu-man, Pu-yiei	Pu-shui	Pu-man
Called by Chinese..	Shui pai-i	Nung, or Lung jên	Sha-jên	T'u lao	T'u-jên	T'u-jên	T'u-jên	T'u-jên	Shui-chia	Chung-chia
Call the Chinese ..	Hor[3]	Pu-hak	..	Pu-hei	Pu-hak	Pu-hak	Pu-hak	Pu-hak	Pu-hak	Pu-ha
1	nêng	liu	dei	yi	ndeiu	yit	deio		to	liu
2	shong	sung	song	song	song	song	song		ga	song
3	sam[3]	sam	sam	sani	sam	sam	sam		ham	sam
4	hsi[3]	si	si	si	si	hsi	hsi		hi	si
5	ha	ha	ha	ho	ha	ha[3]	ha		ngê	ha
6	hŭk	ch'uo	cho(k)	cho	rock	lok	rock		liok	ro
7	chit	chiat	chia(t)	cher	shet	chŭt	chŭt		shet	chāt
8	pĕrk	piat	pia(t)	pieh	pet	pat	pat		pat	pat
9	kao[3]	kou	ku	kao[3]	ku	kou[3]	kiu		chiu	ku
10	ship	sip	ship	ser[3]	ship	ship[2]	ship		sŭp	ship
11	ship-it	sip-at	..	ser-yer	ship-yit	ship-yit	ship-yit		sip-yit	shi-yit
12	ship-shong	sip-ni	..	ser-song	ship-mgi	ship-song	ship-ni		sip-ni	shi-yi
20	sao[3]	ni-sip	..	ni-ser	mgi-ship	ni-ship	ni-ship		ni-sip	ni-ship
30	sam-ship	sam-sip	..	san-ser	..	..	sam-ship		ham-sip	..
100	huai-lêng	..	..	pan-êr	..	yit pāk	yit pak		to pak	pa-diu
1000	hsien lêng	..	..	t'ung-êr	..	yit hsien	yit kuan		ti hien	rênk-diu
Father	po	la-po	..	pu	..	kung-gei	po		pu	po
Mother	mer[3]	la-mi	..	mei	..	a-mei	mê		ni	mei
Brother	nong-ja-yi	lao-pi	..	nuong	..	nung-mao	niong		nung	nuong
Sister	nong-yin	mi-nung	..	nuong	..	..	niong		..	nuong
Head	hŏh	bak-t'u	..	..	..	..	kiu		kum[3]	chiao
Hand	mĕr	p'a-mung	..	..	..	..	fêng		miah	fêng
Foot	ha[3]	dag-ka	..	..	..	..	tin		tin[3]	tin[3]
Heaven	va	bung-fa	..	vor	..	..	bŭn		mun	mên
Sun	ta-wan	t'ang-wan	..	..	..	..	lit		hsiang	tang[3]-wan
Moon	lun	an-hai	..	..	..	..	dŭn		nien	jong-tien
Fire	fieh	fei-i	..	..	..	..	fi		nia	fi
Water	lŭm	num	..	..	..	..	rŭm		nŭm[2]	garum
Dog	ma[1]	tim-ma[3]	..	tê-mo[3]	ma	..	ma		ma[2]	ma[2]
Pig	mu	tim-mu	..	..	..	..	mu		mu	mu
Horse	ma	tim-ma	..	tê-mo[1]	..	..	ma		ma	ma
Goat	..	..	..	tê-yung	..	..	yong		fa-dong	yong
Iron	lik	liak	..	lo	..	..	tiet		'hit	fa
Copper	tong	tung	..	duong	..	..	tung		tong	lüong
Silver	lin	ên	..	r gar	..	..	ên		niun	ngên
Gold	hum	chim[3]	..	chên[3]	..	..	kim		kiung	chim

The rest nearly same as No. 7.

3. Miao-tzŭ Vocabularies.

	1.	2.		1.	2.
Date	Nov. 10, 1885.	Apr. 19, 1886.	Father ..	..	pa
Place	Pai-ai	Kuei-yang Fu	Mother ..	..	mi
Call themselves ..	..	Phŏ	Brother, elder ..	..	t'ia
Called by the Chinese	Huo Miao	He i Miao	,, younger	..	chu-ta
Call the Chinese ..	..	Düor	Sister, elder ..	..	a-lui
1	ho	yi	,, younger	..	nia
2	ou^3	or	Head ..	..	ko^3
3	pu^3	pieh	Hand ..	..	p'ieh
4	pi	thlo	Foot	..	la
5	pa	chia	Heaven ..	ko-ta	vei
6	cho	dier	Sun	nai	t'ai
7	chung	hsiang	Moon ..	..	thlar
8	yi	ya	Fire	..	thiang
9	ch'ou	chüo	Water ..	..	er
10	ko	cher	Dog	..	thlar^1
11	..	cher-ha	Pig	..	pa^1
20	..	or-cher	Horse ..	..	m'a
100	..	yi pa	Goat	..	li
1000	..	yi ser	Iron	..	t'er
			Copper ..	..	tê^2
			Silver ..	..	ni

QUARTERLY SUMMARY

OF

ARCHÆOLOGICAL DISCOVERIES AND WORK, &c.

PREHISTORIC AND BRITISH REMAINS.
- Castle Caldwell, co. Fermanagh.
- Chysauster, Cornwall.
- Woolwich, Kent.
- Elbolton.
- Maldon Road, Essex.
- Havant.

ROMAN REMAINS.
- Dover.
- Sittingbourne.
- Springhead, near Southfleet.
- Peterborough.
- Lincoln.
- Southwark.
- Falkirk.

ANGLO-SAXON REMAINS.
- Peterborough.

MEDIÆVAL CHURCHES, CROSSES, &c.
- Elgin.
- Upper Helmsley, near Stamford Bridge.
- Newcastle.
- Westminster Abbey.
- St. Olave, Old Jewry, London.
- Warrington.
- Barfreston, Kent.
- Swanage, Dorset.
- Kirby Hall.
- Castor, Northampton.
- Llandaff Cathedral.
- Garston.
- Crowland Abbey.
- Ampton, Suffolk.
- Southwark, London.
- Rochester.
- Waltham, Eleanor Cross.
- Canterbury Cathedral.
- Helpstone, near Peterborough.
- Holderness.
- Staffordshire.

COINS, &c.
- West Shefford, near Newbury.
- Lyme Regis, Dorset.
- Paisley.

PREHISTORIC AND BRITISH REMAINS.

A STONE AXE was found during the past summer on the property of J. C. Bloomfield, Esq., D.L., of Castle Caldwell, County Fermanagh. It is remarkable in the fact that a large portion of the original gum, or mastic, in which the timber handle was imbedded, remains upon its surface. This mastic is of a dark-brown colour, and burns with a clear flame, producing an aromatic perfume, and leaving a liquid gelatinous residuum. Axes from Western Australia are secured to their handles in a similar way. This Fermanagh celt was used as a wedge, probably for splitting timber, because the cutting edge is equally bevelled on both sides; the base of the implement is flat, and has clear and well-defined marks of having been struck with a hammer or mallet. It is 5 inches long and 3 inches wide, and measures 1¾ inch across the head. It is made of hard green sandstone, and is of the type usually found in the locality. The handle gripped it round the centre, where there is a slight depression, which is filled with mastic, leaving the cutting edge and head quite free.

Mr. Harrison, of Ightham, has discovered over 400 palæolithic flint implements lying on the surface, at various heights and over a wide area, round Ightham in Kent.

The Council of the Penzance Antiquarian Society have had their attention drawn to the destruction of the British village of Chysauster, and they passed the following resolution :—"That this Society views with regret the damage, wilful or accidental, that has been done to the ancient monuments and buildings in our neighbourhood, and it specially requests the members to make to the honorary secretary individual reports in writing of the state of any ancient monuments or buildings within their personal knowledge ; these reports to be laid before the Council, who shall take such steps as may seem advisable to repair past and prevent future injury." Mr. Cornish said he knew that all the landowners in the locality were well disposed to the protection of these ancient monuments, and any damage done to such remains was done without their knowledge and consent. If the resolution were adopted and acted upon, the Society might call the attention of owners to the condition of the monuments.

A boat, or "dug-out", has been discovered in the excavations for the Albert Dock at North Woolwich, whose form was peculiar, but the interest of which lay in the fact that a section of the soils above and below it—a thing rarely attended to—showed that it belonged to a period very slightly preceding, if not actually that of, the Roman arrival in Britain.

Explorations have, during last year, been going on at Elbolton Cave. During Easter week of 1888, the Craven Naturalists' Society made a special visit to the cave and commenced digging. Since that time investigations have been carried on intermittently, with highly satisfactory results. Elbolton Cave belonged to a much older period than the Victoria Cave, and had not been used in Roman times, as no bronze articles had been discovered. The length of the main chamber was 100 feet, the average height 18 feet, but in some portions 30 to 40 feet high. From the main chamber there branched off a long passage, difficult of access, the floor of which was covered with clay. The floor of the main chamber was covered with *débris* from the roof and clay washed in from the passage. A trench was dug at a certain point in this *débris*, and it was hoped the floor would be reached in 2 or 3 feet ; but although 10 feet had been reached, the floor had not yet been discovered. Among the number of bones found was a human jaw in good preservation, which showed that the possessor had used it well, and probably suffered little from toothache. Later on, another jaw was found by Mr. J. W. Davis, hon. secretary of the Yorkshire Geological Society, and then more human remains. The human bones showed these were the remains of three individuals, three right femurs or thigh-bones being discovered ; and the fact that at a depth of 10 feet from the surface calcined bones with charcoal were found showed that men lived in the cave. Some sharp-pointed bones, which were sent up to Oxford for identification, we were told, were tattooing instruments. Pottery had been found, the character of which was strong proof of the age of the cavern. Tusks of wild boar were not uncommon, and a horn was found which was probably that of the reindeer, while bones of birds were very numerous.

An interesting discovery has been made on Mr. H. Jones's estate in Maldon Road, Essex. While using the plough and hod for cutting the new Beaconsfield Road through the estate, the workmen came upon a large deposit of animal remains, consisting of bones, etc., in small fragments. A close examination revealed the fact that some of these fragments had been worked, and further search brought to light remains of small bone implements in all stages of manufacture. Mr. Hy. Laver, F.S.A., was communicated with, and he pronounced the discovery a most interesting one, the remains probably being the *débris* resulting from the manufacture of bone implements of the Romano-British period. The deposit, which was about 10 feet square, is now broken up, but specimens of the implements will no doubt be placed in the museum.

Some interments have been found in the chalk near Havant. They consist of pit-like cavities 20 ft. deep and 4 ft. square. At the base are traces of burnt matter and bones.

ROMAN REMAINS.

At Dover, the Early Roman Church, situated on the heights, has been reopened, after having been restored, partly at the expense of the War Office, but mainly at the expense of a private individual. In the early part of the last century the roof had disappeared, and little was left but the massive tower and the walls.

A valuable signet-ring has been discovered, embedded in clay, in a brick-field at Sittingbourne, by a workman. The man was engaged in digging clay, when he turned up with his spade a large gold ring of antique pattern. A large cameo is let into the metal, upon which is beautifully engraved a representation of a pair of horses harnessed to a chariot, which is being driven by a man in the dress of a Roman charioteer. The ring is in perfect preservation, and is possibly a Roman relic, as it was discovered on the site of an old Roman settlement.

Mr. G. W. M. Arnold, of Milton Hall, Gravesend, has added to his museum of local antiquities some 1,300 Roman coins, discovered from time to time during the last thirty or forty years in the fields adjoining Springhead, near Southfleet, the site of the Roman Vagniacæ. They comprise an almost complete series from Augustus to Arcadius and Honorius, with a few Consular.

A splinter of Barnack stone, with some Roman letters carved thereon, was found on December 3, in the excavations of the north-east angle of Peterborough Cathedral. It was recognised as belonging to a stone found some time ago in the south transept, and which was unquestionably Roman. When put together, the splinter matched exactly, and helped to form the letters LOTE, and half a letter, O or C; underneath are the letters NO, both evidently being part of some inscription. The stone and the splinter were found amongst Norman work, and had doubtless been used with neighbouring fragments from the remains of the earlier Saxon church, in which building it had been used as a quoin. From the size of the stone,

18 by 15 inches, it doubtless originally formed part of some large inscription-plate on a Roman building, either at Castor or Peterborough.

The removal of an accumulation of soil in a piece of garden ground, the East Bight, in connection with the building operations at Mr. Alfred Shuttleworth's mansion, in Eastgate, Lincoln, has brought to light a very considerable and important fragment of the eastern wall of the Roman city. This fragment consists of a large quadrangular block of solid masonry, with dressed facing projecting inwards from the wall. The original dimensions appear to have been about 24 feet in length north and south, and 15 feet in depth east and west; but much having been removed, it is hard to speak with accuracy. The portion remaining measures 14 feet by 10 feet. It is probable we have here the basement of a quadrangular tower strengthening the wall, midway between the north-east angle and the east gateway. Although large portions of the Roman wall exist in other parts of the circuit, this is the only place in which any of the ashlar facing has been found remaining.

Fragments of Roman pottery have been found near St. George's Church, Southwark.

The North British Railway Company proposes to demolish a portion of the remains of the wall of Antoninus Pius, near Falkirk, which was constructed by Lollius Urbicus, A.D. 140, abutting upon the public road between Bonnyhill and Falkirk. The railway company have included this interesting relic of antiquity within their limits of deviation apparently with the object of obtaining a building frontage, the land not being required for the purpose of forming the railway. The Society of Antiquaries for Scotland have energetically protested against this wanton obliteration of ancient remains, and have suggested a modification of the plan, by which interference with the Roman earthwork would be avoided without detriment to the railway, but the company do not appear disposed to give way. The monument is not included in the schedule attached to the Act for the Protection of Ancient Monuments, and unless some prompt measures are taken for its preservation, it will run great risk of being swept away. We understand that Sir John Lubbock is interesting himself in the matter.

ANGLO-SAXON REMAINS.

On November 8th of last year there were uncovered in the south transept of the buried Saxon church in Peterborough Cathedral a portion of one of the side altars. It was anticipated by the clerk of the works, Mr. J. T. Irvine, that such would come to light during the excavations now proceeding for the arching over of the remains. The portion of the altar now brought to light is the east wall or reredos, and one of the foundation slabs on which rested the pillars to support the altar slab. Both are in their position as they were when nearly a thousand years ago the sacred edifice was fired by the Danes. The reredos wall is about six feet in length, and the supporting slab in front of it about two feet. The sister foundation slab is

not to be found. Another very handsome Saxon tomb-slab has been found in the north transept of Peterborough Cathedral. By its side is a smaller one, and they are supposed to mark the graves of mother and child.

Some workmen having cut out a Saxon burying-ground at the back of St. John's College, Cambridge, a committee took the matter up, and as a result a number of skeletons, about 100 urns, and a large number of weapons and ornaments have been placed in the museum. (See *ante*, vol. ii, p. 257.)

MEDIÆVAL CHURCHES, CROSSES, &c.

The "Muckle Cross" of Elgin has been restored. The first cross was a wooden one of the fourteenth century; this was replaced by one of stone in 1650, having on its summit the same effigy of a lion which now surmounts the restored cross. On the removal of the cross in 1792, the lion was taken to the college garden in Elgin, and placed on the college wall (once part of the precinct wall) near the Pans port, the property at that time of the Hon. Skene Duff. This heraldic lion has now been restored, to the satisfaction of the people of Elgin, and surmounts a new cross, due to the local patriotism of Mr. Macandrew.

The village church at Upper Hemsley, near Stamford Bridge, has been rebuilt upon its old foundations of the tenth century.

On November 1, two human thigh-bones were found by some workmen employed in repairing the pavement of Nun Street, Newcastle. There was also discovered a small headstone, but nothing on it to indicate when the remains were interred. On the previous day the remains of a skeleton were found at the same place. The skull was in a fairly good state of preservation, and contained a number of teeth in excellent condition. The discovery was made at a depth of only two feet. The old convent, from which Nun Street takes its name, once stood on the spot where the remains were found.

Some interesting discoveries have been made at the pulling down of the Church of St. Olave, Old Jewry, London. Some seven feet below the pavement, at the west end of the nave, a very large, roughly built Gothic arch was brought to light. Its form is similar to those of Old London Bridge, and the *Builder* conjectures that it probably spanned a stream which flowed into the Thames from the morass about Finsbury and Moorfields.

The *Building News* published a copy of a drawing of the north transept front of Westminster Abbey, bearing Wren's signature and approval, and dated May 1719. It shows the front as it stood then, and also the alterations or "restorations which were proposed to be made in it, and which, being made with slight modifications soon afterwards, brought it to the form which it had till lately. The *Building News* states that "a new design has been made for replacing the great rose window". A letter signed "M." in the *Athenæum* points out that "that window is indeed not much like what was there in the thirteenth century, and, if

that be all that is required of it, any decently educated architect of our time ought to be able to produce a better. But to one who looks for more in architecture than mere cusps and mouldings it is a good window enough. It fits its place well, and looks well both inside and outside of the church; and as a well-meant and fairly successful attempt to improve the church at a time when such attempts were not generally successful, it deserves better than to be turned out to please a passing whim of fashion. But the window has a higher claim to respect in that it is filled with contemporary painted glass. It is dated 1722, and is a really remarkable work. Glass painting was an art not much practised in the eighteenth century, and two of the best examples of it which we have are in the Abbey, and of them the better is that in the north transept. It is not a mock-mediæval compilation, but it takes its place well and naturally amongst the real mediæval work which surrounds it—far better, indeed, than do most of the correctly 'Gothic' windows put up of late years; and the fact that the style is the style of its own time is not a fault, but a merit. I have no objection to any number of designs for the great rose window being made by any one who chooses to make them; but I earnestly hope that the Dean and Chapter will use their authority to prevent any one of them from 'replacing' the good and interesting work which is already there, and that they will not on any account allow the 'adaptation' of the glass to a new window, which may perhaps be suggested. The glass and the tracery are one design, and to put the glass into tracery of another form would, even if honestly attempted, be its certain destruction."

While a quantity of rubbish was being removed from the cellar of the Warrington Rectory recently, a window was found which formerly belonged to what, before the restoration of the parish church in 1860, was known as the Boteler Chapel. The window consists of a centre panel of frosted glass, which bears the arms of the Boteler family, round which is a border of navy-blue and ruby. It has now been fitted in one of the windows on the south side of the parish church, next to the Patten Chapel. A portion of the window bearing an inscription was shattered beyond remedy. The inscription read as follows: "Beneath this window lieth the body of Sir Thomas Boteler, of Bewsey, Knight, founder of Boteler's Free Grammar School, Warrington. Sir Thomas died April 27th, mccccxxii." The following inscription has been added to the restored window: "In memory of Sir Thomas Boteler, of Bewsey, Knight, who died April 27th, 1522, founder of Boteler's Free Grammar School. Re-erected by N. B. Percival, Churchwarden, 1888." A number of ancient candle-brackets have also been discovered.

The rumours that the ancient Norman church of Barfreston, Kent, was about to be restored, and that in such a manner as to destroy much of the beauty of the building, and permanently injure its unique character (see *ante*, vol. ii, p. 53), seem to have some foundation; in fact, we are told that the church is in urgent need of repairs, not of restoration, and that only the necessary repairs are to be undertaken. The roof is in a miserable condition, and it is intended to impose one of the original pitch; this is

to be of open timber-work sufficiently strong to prevent the walls spreading any further. This is also said to be absolutely necessary, as the walls are considerably out of the straight, and, the plaster having fallen off, showing the laths in a number of places.

Sir J. C. Robinson called the attention of the Society of Antiquaries to the treatment of the tower of Swanage Church, Dorset, by a leading parishioner, who had replaced the old mullions and louvres of the belfry windows by new, in spite of the good condition of the old work, and had now commenced the insertion of a stone moulding round the clock face, to the great disfigurement of the tower. All this had been done without a faculty. After some discussion it was unanimously resolved : "That this meeting of the Society of Antiquaries desires to express a hope that the Bishop of Salisbury will not sanction any plan that involves the alteration or destruction of the ancient character or of any of the ancient features in the interesting old church tower at Swanage."

The Earl of Winchilsea contemplates restoring Kirby Hall. He recently entertained, in the ruined hall, a party of friends and professional gentlemen to discuss his project. A representative of a local newspaper was invited, and the following is taken from his account :—" The ruins of Kirby Hall are a short distance from Weldon Station, on the Midland Line, standing amidst a fertile and well-wooded country, whose belts of trees now display in their foliage the beautiful autumn tints that give the country an attraction of its own at the season of falling leaves. Fifty years have passed since the old grey walls of Kirby Hall, nestling in the shadow of surrounding trees, were inhabited, and the building is in greater part roofless. Its exterior architecture, however, still remains in enduring stone, to be admired as one of the finest examples of Elizabethan design to be found, and though the main roof is gone, and the grass grows where once were floors, the walls, with the old-fashioned oriel windows and broken panes of glass, are still in an admirable state of preservation for so ancient a building. It cannot be said, as Sir Walter Scott remarked of Melrose, that the sun gilds but to flint these grey ruins, whatever enhancing effect moonlight might have, from a romantic point of view. As appears from the crest of a boar's head out of a ducal coronet on several parts of the building, the hall was originally built for the Stafford family, and in 1577 it became the property of Sir Christopher Hatton, who here entertained Queen Elizabeth with great splendour. For a long period Kirby Hall was the principal seat of the Hattons—the family name of the Earl of Winchilsea and Nottingham—and like most buildings of that time, it is constructed round a quadrangle. Above the entrance on the north side was a chapel, and on the south side is a great hall, and also what were the chief living rooms of the family ; while on the western side there was a picture gallery 150 feet long, and on the east of the quadrangle the offices and bedrooms. The best preserved portions of the buildings are the rooms on the south side, where the principal entrance was, and in one of these rooms there was shown, for the inspection of the visitors, some quaint MSS. pertaining to the family. Most interesting was an illuminated MS. by Sir

William Dugdale, containing exact drawings made in 1640 of many arms and monuments then existing in Peterborough, Lincoln, and other cathedrals, but soon afterwards destroyed."

The church porch of Castor, Northampton, has undergone "restoration". The roof has been thoroughly repaired. New oak moulded plates, of the same design as the old, were found to be necessary, and all new English oak, span 6 feet by 4, and the same covered with best red 1½ deal boards and covered on top with new lead 6 lb. to the foot, and the gutters with 7 lb. lead and proper down pipes conveying the water clear from the building. The outer walls have been thoroughly repaired and the plaster cleared off the inside (the porch was last repaired in 1733), thereby showing the old rude masonry. Parts of the remains of the old Norman porch were discovered by several heads belonging to the corbel course of same style as in the south transept.

It appears that owing to "restoration", Landaff Cathedral is now in a "dangerous state". We reproduce, without further comment, the following from a local paper: "When this cathedral was restored, about fifteen years ago, the diocesan architect, the late Mr. John Pritchard, surmounted the south-west tower with a spire, the base of which is surrounded with large statues of Bishop Ollivant, St. Dubricius, and others connected with the cathedral. At that time Mr. Freeman not only denounced the spire as a work not in keeping with the remainder of the structure, but also doubted, as the old tower was only surmounted with a pinnacle, whether the foundation would carry the spire. Ten years ago a rather alarming crack appeared in the tower, and recently a second one, still more alarming. Mr. Seddon, architect, came down from London, and on examining the base of the tower, found that a settlement had taken place, and the apex of the tower, when tested, was found to be considerably out of the perpendicular. The work was placed in the hands of Mr. Clarke, builder, who has been two months at work trying to secure the tower from further depression, but several architects are of the opinion that the spire will have to be moved. It appears that a spring was left under the piers without a course being provided to carry off the water, and this has spread and destroyed the masonry. In the excavations recently made by Mr. Clarke, he has discovered not only the foundation of an ancient British church, but has brought out six stone coffins or cists, the bodies in which were in a perfect state of preservation, and were removed from the stone coffins and interred in the cemetery. One stone coffin is perfect, and is undoubtedly the best specimen of the kind yet found in the principality. There are others in the ground there, and will be unearthed as the work proceeds. The rebuilding of some of the piers at the western part of the cathedral Mr. Clarke considers absolutely necessary. The western end is now barricaded, and the congregation enter and leave by the north and south doors."

The church at Garston, Lancashire, was a plain but very substantial structure of red sandstone, rebuilt in 1715 by Edward Norris, of Speke Hall, a very fine timber house standing about three miles to the south of Garston.

This church, of 1715, which was a plain parallelogram, and of small size, has recently been taken down, and its materials used to construct a wall to the new churchyard. Below the foundations were found numerous stones belonging to an earlier and much larger building. These consist of many pieces of octagonal columns and responds; capitals of pillars of two patterns, evidently from nave and chancel arcades; fragments of chancel arch-piers, very richly and elaborately panelled, with late perpendicular tracery, beautifully wrought in white freestone; many pieces of moulded copings, and of a crenulated parapet; window-mullions and tracery, some being evidently belfry windows from a tower; gargoyles and voussoirs of arches, and other work. All these indicate a building of some importance, the details being all large and bold. The date of nearly all these fragments appears to be late fifteenth or early sixteenth century. From the number of capitals found, the church cannot have had less than three bays in the nave and two in the chancel. Some of the richer work of fine stone may not improbably have formed part of a private chapel attached to the church, and, judging from its style, it would correspond with the date of the Norris who fought at Flodden, and afterwards took part in the English invasion of Scotland, whence he brought from Holyrood House a magnificent piece of Renaissance panelling, which he set up in his hall at Speke, where it still exists. It is much to be regretted that the greater part of these interesting remains were cut up to build the churchyard wall, in spite of many protests made against such vandalism. The indifference to antiquarian pursuits which is characteristic of Liverpool and its neighbourhood is more to blame for this than the contractor into whose hands these relics fell; he would willingly have carried out any plan put forward for their preservation.

A local newspaper gives the following news of the works in progress at Crowland (or Croyland) Abbey: "The fine old ruins of the east end of the nave of Crowland Abbey have been put into a very good state of repair by Mr. Thompson, of Peterborough. The pillars, arch, and screen have been thoroughly overhauled, and to all appearance will be preserved, without much further outlay, for several generations. The pillars and arches of the south arcade are next to be taken in hand, and it is to be hoped that the fine old doorway in the west front will not be neglected for want of funds. The rector of Crowland Abbey writes that the workmen employed at Croyland found the piers of the south arcade of the old nave built upon column stones and capitals of Norman work used as spreading footing. The portions so found correspond to the existing portions of Joffrid's Abbey (1113). Some of the stones are completely split, no doubt from the earthquake in 1114."

A number of late brasses have recently been found in Ampton Church, Suffolk, and are to be relaid in their original slabs.

Two almost perfect pilgrims' bottles have been found in Tabard Street, Southwark, in some recent excavations, one being of green-glazed ware, the other red.

A fine incense-boat of latten, once gilt, was recently found near Rochester. It is of Italian work early in the sixteenth century.

With the exception of the railing round the monument, the work of renovating the Eleanor Cross at Waltham has been completed. Mr. Harry Hemms, of Exeter, a well-known sculptor, had charge of the work. The original parts have been carefully placed in their proper positions, with the substantial work of the newer parts. Among the original pieces of carved stone which are now in the cross are several pieces which for years had been buried in the walls of the Falcon Hotel, and some pieces which had been dug out of the foundation when excavating some time ago. The original cross which surmounted the monument is now in the hands of one of the Restoration Committee. In 1832 it was discovered embedded close to the monument, and from it Mr. Clarke, the architect at the restoration of 1832, designed the cross that at present surmounts the structure. The original cross is much chipped and otherwise damaged.

An interesting discovery in connection with Canterbury Cathedral has been made. In the year 1827 there were two large portraits above the Warriors' Chapel; one was that of St. Gregory, and the other that of St. Augustine. They suddenly disappeared, and were supposed to have been stolen, but they have come to light again. From a communication made by the Countess of Guildford to Mr. H. G. Austin, that gentleman visited Eythorne, and there recognised the pictures. They had been stored away in Eythorne Church, covered with straw, no doubt being considered practically useless. They have just been handed over to the cathedral authorities by the Rector of Eythorne.

Mr. J. T. Irvine has been noting some ancient remains recently found near Peterborough, among which were portions of stone interlaced work from the tower of Helpstone Church, now in the vicarage gardens, and part of a cross shaft, also of interlaced patterns, now lying in a mason's yard, having been used as pitching to a public road at Caistor.

A remarkable metal crucifix has been discovered beneath the chancel-floor of a church in the Holderness district. It is of bronze, and the figure is hollowed out at the back. It is six inches long, and the stretch of the arms is five-and-a-half inches. The feet are not folded over each other. The full drapery round the waist is fastened with a girdle, and comes down nearly to the feet. The crucifix cannot be later in date than the twelfth century, and is possibly not a little earlier than even this. Metal crucifixes of such a date are exceptional; the British Museum contains nothing within two centuries of it. It seems probable that it is of English make, with certain Irish characteristics in the mind of the artificer. It has evidently been attached to wood, possibly to a processional cross.

Mr. C. Lynam discovered a singular flat plate of copper of thirteenth century date, on which were engraved two seal-like medallions, one representing David with the harp. It was found in Staffordshire.

COINS, &c.

A small but interesting hoard of silver coins has come to light in an old half-timbered cottage at the little village of West Shefford, near Newbury. It consists chiefly of shillings and sixpences of Elizabeth, James I, and Charles I; they were found in a jug secreted in a hole under the stairs. The cottage is just opposite the manor house where Charles I was quartered when on the march to Oxford in November 1644, with his army. He had passed through the village the previous year, the day before the memorable battle of Newbury Wash. One of the shillings of Charles I is of the rude type struck at the Tower of London after the king had fled from the capital, when the regular officers of the Mint were probably dispersed.

Early in January a silver penny of the reign of Henry II was found at Lyme Regis, Dorset. Coins of this reign are very scarce, and the one under notice bears evidence of being long in the ground.

A North British newspaper states that while several labourers were at work repairing a drain in East Buchanan Street, Paisley, one of them found a gold coin which seemed to be of ancient date. The markings are indistinct. It is irregular in shape, and weighs over 4 dwt., and is slightly smaller than a sovereign.

All communications should be directed to "The Editor, Archæological Review", 270, Strand, W.C.

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ARE THERE TOTEM-CLANS IN THE OLD TESTAMENT?[1]

IN the *Journal of Philology*, No. 17 (vol. ix, 1880), Professor Robertson Smith, the eminent Orientalist and Biblical critic, contributed a paper entitled "Animal Worship and Animal Tribes among the Ancient Arabs and in the Old Testament" (pp. 75-100). In this he applied McLennan's views[2] to show that a tribal arrangement existed among the early Hebrews, analogous to the totem-clans of the North American Indians, and gave reasons for considering David to be a member of a Serpent clan, worshipping the serpent as an eponymous ancestor and united by ties of kinship with other branches of the clan among the Ammonites. He also saw traces of totem-worship about the Temple even as late as the time of Ezekiel, and ingeniously explained the abstinence from unclean beasts, birds, and fishes among the Hebrews as survivals of totem-worship, since every member of a totem-clan religiously abstains from eating the eponymous animal, or only eats it eucharistically. Startling as these applications are, they have found unusually ready acceptance among Biblical scholars[3] and anthropologists. Prof. Cheyne, who is ordinarily very cautious, welcomes the suggestion in his admirable edition of *Isaiah* (i, 99; ii, 103-4, 303), and Prof. Sayce does the same (*Anc. Empires of East*, 203-5). Prof. Stade also adopts it in his *Geschichte Israels* (i, p. 408). The school of McLennan, who regard totemism as the earliest stage of the family,

[1] Parts of the following paper were read before the Society of Biblical Archæology in 1885.

[2] McLennan had already suggested the application of his theories to the Hebrews (*Fortnightly Review*, 1870, i, p. 207), but Professor Smith has the merit of developing the suggestion.

[3] Professor Dillmann, however, rejects them rather cavalierly, *Genesis*[4], p. 368.

have naturally welcomed confirmatory evidence from Semitic sources (J. F. McLennan, *The Patriarchal Theory*, 1885, p. 229); and Mr. Andrew Lang, who tends to find in animal worship the key to all the mythologies, refers to Professor Smith's memoir as undoubted evidence (*Custom and Myth*[2], 1885, pp. 115, 261). Dr. Wilken, of Leyden, developed one side of the evidence so far as it relates to kinship through females among the early Arabs, founding himself on the results reached by Professor Robertson Smith (German translation, *Das Matriarchat bei den alten Arabern*, 1884).[1] Prof. Smith has followed this up by an elaborate work on *Kinship and Marriage in Early Arabia*, 1885, in which, however, he does not deal again with the Biblical aspects of the question except incidentally. His paper in the *Journal of Philology* still remains the sole authoritative utterance of the Professor on the subject, and I deal with this in the following remarks, in which I shall endeavour to show that considerable caution must be observed before accepting Professor Smith's ingenious theories, at any rate in the unrestricted form in which he has posited them. Though I have widely extended the evidence by which his conclusions might seem to be established, I am unable to recognise definite traces of the actual existence of totem-worship and totem-clans in historic times among the Israelites.

But first, what is a totem-clan? It is a collection of men and women who reckon themselves of the same kinship traced originally through their mothers only, who worship some animal or plant which they regard as their ancestor, and bear tattooed on their skin. All the members bear the totem-name, must seek mates in *another* clan, and must abstain from eating the totem-animal or plant, while they are all obliged to avenge injury done to one of their number. It will thus be seen that this organisation is of a highly complex nature, and it is *à priori* improbable that it would occur very widely, except among tribes closely connected with animals, *i.e.*, nomads. Totemism, in the full sense of the word, is only known to exist among North American Indians and among the Australian tribes, where the totem is termed "kobong". One characteristic of the totem organisation deserves fuller treatment owing to its importance, and I cannot explain this better than in the words of Mr. Lang.

"Among races which are still in the totemistic stage, *i.e.*, which still claim descent from animals and from other objects, a peculiar

[1] The late Mr. Redhouse, however, disputed very warmly the validity of Wilken's views in the *Journ. R.A.S.*, 1885.

marriage law generally exists, or can be shown to have existed. No man may marry a woman who is descended from the same ancestral animal and who bears the same totem-name and carries the same badge or family crest as himself. A man descended from the Crane, and whose family name is Crane, cannot marry a woman whose family name is Crane. He must marry a woman of the Wolf, or Turtle, or Swan, or other name, and her children keep her family title, not his. Thus, if a Crane man marry a Swan woman, the children (boys) are Swans, and none of them may marry a Swan; they must marry Turtles, Wolves, or what not, and *their* children again are Turtles or Wolves. Thus there is necessarily an eternal come and go of all the animal-names known in a district." (A. Lang, *Custom and Myth*[2], p. 106.)

Now Prof. Smith claims, as I understand him, to have proved that totem-clans of a kind like those just described existed in Canaan and in Israel in historic times. That animal-gods were among the various forms of idolatry practised at various times by the Israelites, is a perfectly recognised fact: the golden calf, the brazen serpent, Dagon the fish-god, and Beelzebub the fly-god, are perhaps the most familiar figures in Biblical idolatry. The new points contributed by Professor Smith's paper are that these or similar gods were regarded as ancestors that gave names to clans, tracing descent through females. We must seek, therefore, for traces of all the above "notes" of totem-clans before deciding upon the truth of Professor Robertson Smith's hypothesis. I proceed to investigate these under the following rubrics:—

I. Names derived from animals and plants.
II. Worship of ancestors and of animals.
III. Exogamy and kinship through females.
IV. Forbidden food.
V. Tattooing and clan-crests.
VI. Blood-feud and wergild.

I.—Animal and Plant Names.

Professor Smith gave a selected list of about thirty persons and towns which bear names derived from animals and plants. I have expanded this into a list[1] of 160 such names, which I believe practically exhaust the subject, and enable inductions to be based on the widest collection of facts.

[1] This list will be published elsewhere. Many of the names are mentioned in the body of the paper.

At first sight so large a number seems to show a preponderating proportion of animal and plant names among the personal names of the O. T.; but, as a matter of fact, the proportion is considerably less than is found in England at the present day. There are some 120 persons[1] bearing this class of name among the 15,000 whose names are recorded in the O. T., less than one per cent. Now among English surnames, as represented by Mr. Bardsley's excellent book on that subject, I find that nearly three per cent. are derived from plants, birds, beasts, and fishes; among them, Brock (badger), Kite, Lyon, Dove, Lovel (wolf), Wolf, Buck, Hart, Todd (fox), Marten (weasel), Stoat (*idem*), Mouse, Kenn (dog), Pigg, Galt (pig), Sugden (sow), Purcell (*porculus*), Fish, Nokes (oak), Snooks (Seven oaks), Lind, and other names that occur in the list from the Hebrew.[2]

Similarly, in Miss Yonge's *History of Christian Names*[2], 1885, two out of the ten sources from which she traces their origin are animals and plants[3] (p. 5). As, therefore, we find animal and plant names among the ancient Hebrews even less frequently than among modern Englishmen, who are certainly not totem-worshippers,[4] the argument from such names cannot be regarded as proving much. So, too, it certainly seems unnecessary to see in Oreb (raven) and Zeeb (wolf), the princes of the Midianites, names of clans, as Professor Smith would wish us to do, as they would in that case have personal names in addition to these gentilicia.

Indeed, when examined carefully, very few of these names turn out to be family names at all, as they should be on Professor Smith's hypothesis. In fact, only thirty of the persons with these names are named as fathers or mothers, so that they might be regarded as surnames; and of actual gentilicia ending in the patronymic *yud* there are only the following: Bechorites (Camel tribe), Calebites (Dog tribe), Arelites (lion), Arodites (ass), Elonites (oak), Shaphamites (serpent), Tolahites (worm), Shomathites (garlic), Zimrites (chamois), Zorites (hornet). Of these more than half occur in the remarkable list of the clans of the tribes of Israel

[1] Nearly forty of these are, besides, found only in the very late books, Chron. (Ezra, Neh.) and Esther.

[2] Cf. Pott, *Personal-Namen*, 1860, p. 104, and Ploss, *Das Kind*, 1883, i, p. 30. We can understand that Esther should be called *Hadassah* (myrtle), and Tamar, the Palm, without resorting to any violent hypothesis.

[3] Cf. the legal luminaries John *Doe* and Richard *Roe*.

[4] Mr. Grant Allen (*Anglo-Saxon Britain*, p. 79) suggested that some of the Anglo-Saxon settlers were totem-clans, but without much evidence. The question has, however, been recently put on another footing by Mr. Gomme, as the readers of this *Review* will shortly have an opportunity of judging.

given in Num. xxxvi, and in another connection will engage our attention later.[1]

But it would be unfair to assume that all the personal names in the O. T. derived from animals and plants are merely personal. As is well known, the Hebrews, and indeed all early nations, preferred to put their geographical and ethnographical knowledge in the form of genealogies. Thus, when it is said (Gen. x) "Canaan begat Sidon", it is as if one should say "Wales begat Monmouth, and Flint, and Glamorgan", etc. And there is one genealogical table in Gen. xxxvi which will well repay our attention in connection with our immediate subject. More than one-third of the Horites, the descendants of Seir (the he-goat), bear animal names; and we also find that those clans of the Edomites who were connected with the Horites had also animal names, as a glance at the genealogies on the next page will show. Nay more, wherever we trace a connection with these Horites and Edomites we may expect with confidence to find animal or plant names. It is a disputed question what was the real name of Moses's father-in-law, whether Jethro, Reuel (Raguel), or Hobab, but from Judges iv, 11, we conclude that he had some connection with the Kenites, and the name of his daughter Zipporah (*Little Bird*), occurs in our list.[2] So, too, when the tribe of Judah received the powerful accession of the Dog tribe (Calebites),[3] in its career of conquest, it is from the

[1] The following table gives a classification of the persons mentioned in our list, according as their names may be regarded as personal or surnames:—

(A). PERSONAL.

		From Israel.
i. Sons	51	... (17)
ii. Males (father unnamed)	20	... (12)
iii. Daughters	4	
iv. Females (parent unnamed)	8	.. (1)
Total	83	(30)

(B). SURNAMES.

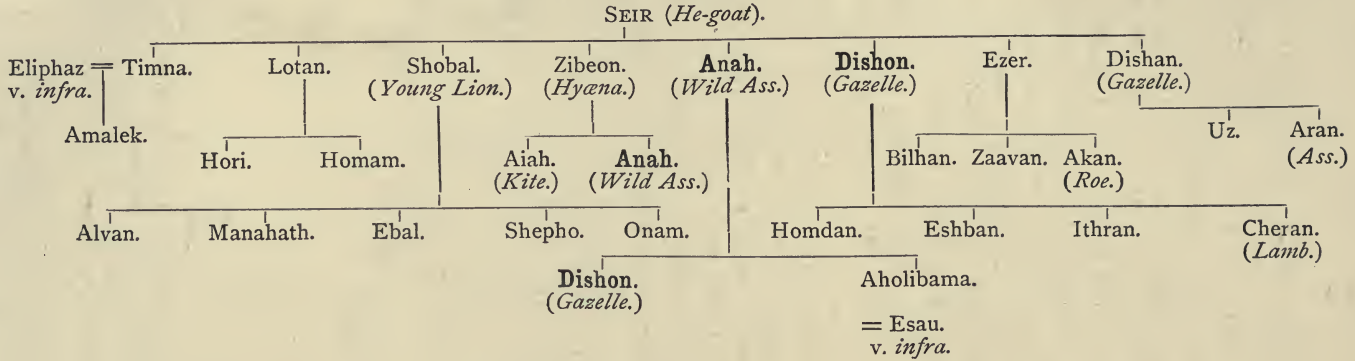
		From Israel.
i. Fathers	22	... (4)
ii. Mothers	5	
iii. Patronymics	12	... (4)
Towns	40	... (40)
Total	79	(48)

[2] Cf. on the relations of the Midianites, Moabites, and Edomites, Baker-Greene, *The Hebrew Migration from Egypt*, p. 162. Job was a son of Uz, one of the Horite tribes, and his daughter Kezia bears the name of the cassia tree.

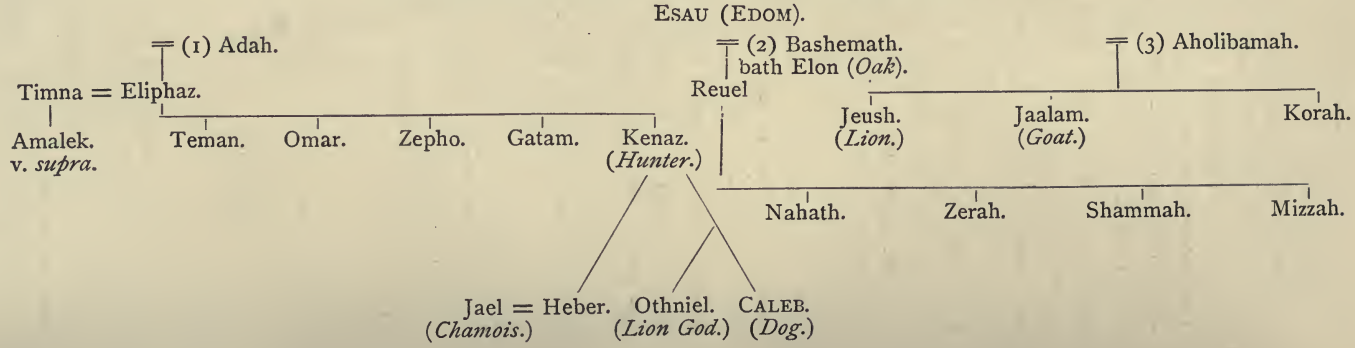
[3] The following is a rough classification of the distribution of the personal names in our list :—

Horites, etc.	... 11	Israelite clans	... 16	Early miscell.	... 6
Kenites ...	... 11	Hittite and Hivite	2	Late ...	... 9
Midian, and Moab	6	Women ...	... 7	Sporadic	... 10

I.—GENEALOGY OF THE HORITES.



II.—GENEALOGY OF THE EDOMITES.



country of Kenaz (the Hunter), the son of Edom, that Caleb comes.[1] The importance of the Calebites in the making of Palestine is shown by the great attention paid to their genealogy by the chronicler, who gives no less than five different accounts of the tribal and local relations of the Dog tribe (1 Chron. ii, 18-20, 42-49, 50-55; iv, 11-12, 15). Though occurring in so late a book as Chronicles, these genealogies are clearly old, as the writer goes out of his way to say "these are ancient things" (iv, 22). Now, in these various accounts of the Calebites, many names occur from our list, viz.: Ardon, (great ass), Elah (oak), Shobal (lion), Shumathites (garlic); Zorites (hornet); Tappuah (citron). And, in fact, when we review the names and persons given in our list, it will be found that over a third of all the names belong to the tribes which wandered about the Land of Seir, from the Arnon to the eastern head of the Red Sea.

Here, then, if anywhere, we may expect to find our totem-clans in the Old Testament, and it is hence that Professor Smith has drawn his chief examples. Undoubtedly the aggregation of such a number of animal names cannot be accidental. Professor Dillmann, a very great authority, but one rather biased against the school of Wellhausen, remarks that it is only natural that nomad tribes should select names from the objects with which they are most immediately concerned. To the nomad, animals are friends, foes, servants, and pets to a greater degree than with other men It might therefore be a natural result of this familiarity, that one-third of the Horite clans should have animal names. And, indeed, if Professor Smith trusted entirely to the evidence of names, we might point out to him that it is the main boast of the anthropological school of prehistoric inquirers, that they have opposed the unfounded conclusions based by philologists on the mere etymologies of names. Unfortunately, the Bible gives scarcely any information about the habits of these tribes which would enable us to ascertain whether the Horites presented the other properties of totem-clans—exogamy, female descent, the totem worshipped as ancestor, and regarded as *tabu*, etc. The learned Professor has, however, ingeniously extracted some evidence on the first point merely from the arrangement of the clan-names in Gen. xxxvi. Before we turn to examine this, there is a remark worth making which bears on the whole method of his examination. Supposing him to have succeeded in proving the existence of totem-clans

[1] Cf. Mr. Fenton's reconciliation of the accounts in Josh. i and ix, in his excellent *Early Hebrew Life*; also Wellhausen, *De Familiis Judaicis*, 1870.

among the Horites, his success would carry with it certain conclusions which bear with negative force against their existence among the Israelites, in whom he and we are more deeply interested. The Horites were nomads, and totemism in its full force has only been found among tribes of hunters. With agricultural nations, the importance of wild beasts largely disappears, and the very fact that the Professor seems to have shown the existence of full totemism among the nomad Horites, tells strongly against its being found as anything more than a survival among the agricultural Hebrews. With this remark we turn to his and our evidence for the existence in the Old Testament of the remarkable social arrangements known as

II.—Exogamy and Descent through Females.

The name "exogamy" was given by the late Mr. J. F. MacLennan to the curious but widely spread custom by which men were prevented by a law of quasi-incest from marrying within their own clan, *i.e.*, to women of the same surname as themselves. The custom is still extant in China and India, and forms a characteristic part of the customs of the North American Indians and Australians.[1] It is mostly found combined with the equally curious custom of tracing descent only through females. This latter practice is traced by anthropologists to a state of society where what is euphemistically called "promiscuity", or "communal marriage", is prevalent, and where the cynical epigram, "Maternity is a matter of fact, paternity a matter of opinion", exactly represents the state of kinship.

Professor R. Smith attempts to find these customs indicated by the names of the Horite tribes. Anah (wild ass) is said to be (1) "the daughter of Zibeon the Hivite" (Gen. xxxvi, 2), (2) a child (son) of Zibeon (*ibid.*, 24), (3) a son of Seir (*ibid.*). In the first passage he emends with all scholars "Hivite" into "Horite", but does not take into account that most authorities read with Sam. Lxx and Pesh. "son" for "daughter". From the latter word he deduces kinship through females among the Horites on extremely slender grounds. And from the existence of a sub-clan, *Anah*, among the Zibeonites as well as among the Seirites, he concludes that there was exogamy, so that no members of the Anah clan could intermarry. This seems at first sight a somewhat wild

[1] J. F. McLennan, *Studies in Ancient Society*, pp. 74-82; Sir J. Lubbock *Origin of Civilization*, p. 122.

conclusion from very slight data, but it is really a fair working hypothesis to account for sub-clans of the same name among different Horite tribes, of which we find another instance in the *Dishon* sub-clan. If kinship were traced through the father, all members of a clan would have the same clan-name. But if kinship were traced through mothers only, and exogamy prevailed, the same clan-name could easily be spread through the tribe. There still remain two difficulties: (1) some members of the Anah clan would also be members of the Dishon sub-clan, and it is difficult to see how they could have two clan-names; (2) the system of sub-division and of animal nomenclature is not systematically carried through all the tribes. These difficulties are not perhaps insurmountable, as only implying the decadence of the totem system in Edom; and we may allow that Professor Smith has shown the existence of animal names among the Horite tribes, has rendered it probable that exogamy and descent through females existed among them, and has thereby raised a presumption that, if we had further evidence, we should find the other marks of totem-clans among the Edomites.

Can he prove the same for Israel? It cannot be said that the arguments he himself gives are very conclusive. He explains the remarkable disappearance of the tribe of Simeon from history as being due to its keeping up the system of exogamy, while the other tribes settled down into a local habitation and a name. He bases this, in the first place, on Hitzig's rather forced connection of the name Simeon with the Arabic *Sim'*, a cross between a hyæna and a wolf. He then contends that Shimei and Simeon are identical, and points out that there were Shimeis among the Levites (Ex. vi, 17), the Reubenites (1 Chr. v, 4), and Benjamites (the well-known curser of David). Besides the uncertainty of the various identifications, we shall see that other tribes had clans of the same name among them without disappearing, and he overlooks the continued existence of the tribe of Simeon to the time of Hezekiah (1 Chr. iv, 41). Their nomad habits, and liability to attack from other nomads, are a sufficient explanation of their disappearance, without any resort to far-fetched etymologies and hypotheses.

And, indeed, he could have found other evidence of exogamy among the Israelites without resorting to the tribe of Simeon. The remarkable twenty-sixth chapter of Numbers[1] does for the

[1] It may be observed that the early date of this chapter would not be necessarily established by the marks of ancient organisation, which I attempt to show in it. Such lists are frequently handed down from time immemorial.

Israelites what Gen. xxxvi does for the Horites and Edomites, gives the clans of the Tribes. Of this there can be no doubt, as the names of the clans are in almost every case adjoined to their eponymous ancestor. It is formed on the plan laid down in the opening words: "The children of Reuben, Hanoch, of whom came the family of the Hanochites, of Pallu, the family of the Palluites," and so on (Num. xxvi, 5). Altogether 72 clans are mentioned, and of these at least ten occur in two tribes—the Nemuelites, a sub-clan of the Palluites, in Reuben and in Simeon; the Zarhites, in Simeon and in Judah; the Hezronites, among whom the Calebites were adopted, in Reuben and in Judah; and, most striking of all, the Arodites, or wild ass clan, both in Gad and in Benjamin, where they appear under the dialectic form of Ardites. It is also possible that the Jeezerites of Gilead, of Manasseh, were connected with the Jeezerites of Naphtali. And besides this, other clans have animal names, as the Shallimites, or Fox clan, of Naphtali; the Shuphamites, or Serpent clan, of Benjamin; the Bochrites, or Camel clan, of Ephraim (and, according to 1 Chron. also of Benjamin); the Elonites, or Oak clan, of Zebulon; the Tolahites, or Worm clan, of Issachar; and the Arelites, or Lion clan, of Gad. Nor is this all, in the enumeration of the Spies (Numb. xiii) the names of their fathers are clearly patronymics of clans or families (*e.g.*, Caleb b. Hori, Nahbi b. Vophsi, Geuel b. Machi, Gabriel b. Sodi), and among them are the families of the Gemallites, or Camel clan, of Dan, and the Susites, or Horse clan, of Manasseh. So, too, in the two lists of the princes of Israel (Numb. i and xxxiv), there are members of the clan Ammihud in Simeon, Ephraim, and Naphtali. And if we might assume that the Israelites called the towns they founded after their own names, we might observe that there were Ajalons, Stag towns, in Dan, Ephraim, Zebulon, and Benjamin. Of direct evidence of the existence of exogamy I can only adduce one striking passage, the tradition about Ibzan the judge, of whom the only thing recorded is that he "had thirty sons and thirty daughters, whom he sent abroad, and took in thirty daughters from abroad for his sons" (Ju. xii, 9).[1] A better description of exogamy could not well be given. But as it is impossible to consider this practice as being introduced so late, this tradition possibly records the popular memory of the last clan that kept up the practice.

[1] It is, perhaps, worth while remarking that of the twelve judges (Shamgar being a doublet of Samson), Tola, Deborah, Elon, and Samson have totemistical names, and the former is clearly identified with the eponym of the Tolaites. Notice, too, the "nunation" of the names Gideon, Elon, Ibzan, and Samson.

Exogamy is regarded by McLennan as a further stage from totemism, though co-existing with it, and we may therefore conclude that totemism, as a bond of connection of the Israelites, had lost its vitality, and we should only expect to find "survivals" of it in the later history.[1]

Exogamy and totemism are mostly found connected with the custom of tracing descent through females, to which we now turn. This, as we have said before, is a relic of the time when marriage of the modern type hardly existed, and the research of paternity was forbidden or impossible. Prof. Smith, and before him Mr. Fenton (*Early Hebrew Life*, 1881), notices several survivals of this stage of society. When descent is only reckoned through the mother, half-brothers and sisters may be regarded as having no relationship to one another, and may marry, as we know they did in the case of Abraham and Sarah, and could have done in the case of Tamar and Amnon (2 Sam. xiii). Presents were given to Rebecca's mother and brother (Gen. xxiv, 53). Abimelech appeals to his mother's kin as being of his flesh (Ju. viii, 19). Mr. Fenton even explains the relations of Lot and his daughters as innocent, since on the earlier system of kinship fathers were no relations to their daughters. It might be added that Naomi tells Ruth to return to her "mother's house" (Ruth i, 8), and the Shunamite speaks of her mother's children (Cant. i, 6). David's three heroes are called after their mother Zerujah (2 Sam. xvii, 25; 1 Chron. ii, 16).[2] Much of this seems to me the natural result of polygamous conditions, and scarcely to prove a state of kinship *only* reckoned through females, though it certainly bears with great force against Sir H. S. Maine's patriarchal theory, according to which the wife is practically non-existent in reckoning kinship (agnation). McLennan, however, gives strong reasons for believing the Levirate to be a survival of what he terms Tibetan polyandry (*Patr. Theory*, pp. 157-9). The standing term for clan, "father's house", is against the assumption that kinship through females existed among the Israelites in historic times.

To sum up this branch of our inquiry, we have found traces of

[1] Marriage by capture is legislated for Deut. xxi, 10, *seq.*, and a celebrated case of the whole tribe of Benjamin gaining their brides in this way occurs, Ju. xxi.

[2] The case of the Nethinim and Solomon's servants (Ez. ii, 43-60; cf. Neh. vii) is somewhat different. No less than three-quarters of the names of parents seem to be those of women, but this is probably because they were the children of the *Kedishoth*, or *hiero-dulæ*, who were only removed in Josiah's time. (See *Babyl. and Orient. Record*, Feb.-March 1888.)

exogamy dying out in Israel at the time of Judges, and also evidence that when they settled in Canaan, the Israelite tribes had something answering to the totem arrangement among their clans. But it is highly improbable that this arrangement could be kept up when the Israelites became mainly an agricultural people, and we can only expect to find "survivals" of it in the times of the Kings.

III.—Ancestor Worship and Animal Worship.[1]

There can be little doubt that the *Teraphim* were of the nature of ancestral gods; they were clearly gods of the household, as distinguished from the deities of public worship, and we find in Rome and Greece the cult of the Lares and Penates having a distinctively ancestral cast. Distinct reference to worship of the dead is made in Isaiah viii, 19: "Are not the people wont to speak unto their gods (*Elohim*), unto the dead instead of to the living?" (*Cheyne*); in Psalms cvi, 28: "They joined themselves unto Baal Peor, and ate the sacrifices of the dead"; and the practice is referred to even at so late a date as in the Mishna, in a saying attributed to R. Simon b. Jochai (*Pirq. Aboth.*, edit. Taylor, iii, 15). When Jonathan seeks to explain David's absence to his father, his words seem to bear a reference to some kind of sacrifice to family gods. David is made to say, "Let me go, I pray thee. Our family hath a sacrifice in the city (Bethlehem), and my brother he hath commanded me to be there" (1 Sam. xx, 29).

Professor R. Smith has proposed an ingenious explanation of the family worship of David, though, strangely enough, he does not bring it in connection with the passage I have just quoted. Among the ancestors of David is Nahshon, or the Great Serpent. Abigail, his sister, is said to be the daughter of Nahush, the Serpent, which must therefore, according to the Professor, be a name of Jesse or of the family.[2] In the royal courtyard afterwards stood the great Brazen Serpent, which received divine honours, and Adonizah was crowned at the Serpent stone. Putting all these facts together, Professor Smith suggests that David was a member of a Serpent totem-clan. He connects with this the fact that the shepherd-king was on good terms with Nahash, king of the

[1] On ancestor worship among the Arabs, cf. Goldziher, *La Culte des Ancêtres chez les Arabes*, Paris, 1885, from the *Revue de l'Histoire des Religions.*

[2] Von Baudissin suggests that it might be the name of her mother. (*Stud. z. Semit. Religionsgeschichte.*)

Ammonites, although the Israelites in general were at war with him, the tie of clanship overruling national antipathies. All this seems to me far-fetched, and based in large measure on incomplete grasp of the totem arrangement. For, first, the names Nahshon and Nahash are personal, not clan-names. Then there is no sign that the Brazen Serpent was intimately connected with the Davidic dynasty: tradition terms it the "serpent of Moses". Again, there is no trace in the genealogy of David's descent being traced through females, as would be required if it was desired to connect him with the Ammonites—though, on the other hand, Ruth was a Moabitess. And, finally, David's friendship with Nahash can be easily explained by the fact that they were common enemies of Saul, and is paralleled by David's connection with Achish. As soon as David becomes King of Israel, the Ammonites cease to be friendly towards him. We must therefore, I think, reject the instance of David which Professor Smith regards as a proof of the existence of totem-clans among the Israelites in historic times; even though we may recognise traces of ancestor-worship in David's family.

Animal Worship.—And similarly with regard to animal worship among the Hebrews. There can be no doubt that it existed. The legend of the Golden Calf and of the Brazen Serpent are among the most prominent of Biblical stories. Professor Smith brings in the second commandment as showing that animal worship was the great rival of the worship of the true God—"Thou shalt not make unto thyself any likeness of any thing that is in the heavens above (birds), or that is in the earth beneath (animals), or that is in the waters under the earth (fishes)." This has been in a measure always recognised. But it has never been suggested before Professor Smith that this worship was connected in any way with the tribal arrangement of the Canaanites or the Hebrews. What proof has he of the connection between this worship and the family organisation of the Hebrews? He makes for this purpose an ingenious use of a passage of Ezekiel, which is indeed a most striking one, and has been, so far as I can observe, the cause of Professor Smith's views being so widely accepted. It therefore deserves our closest attention. It runs as follows (Ez. viii, 7-11): An angel carries Ezekiel from his place of exile to Jerusalem, and shows him the image of jealousy being worshipped in the north court of the Temple, and then promises to show him even greater abominations. "And he brought me to the door of the court, and when I looked, behold a hole in the wall. Then said he

unto me, Son of man, dig now in the wall: and when I had digged into the wall, behold a door. And he said unto me, Go in and behold the wicked abominations that they do here. So I went in and saw: and behold every form of creeping things, and abominable beasts, and all the idols of the house of Israel, portrayed upon the wall round about. And there stood before them seventy men of the ancients of the house of Israel, and in the midst of them stood Jaazaniah ben Shaphan (the Coney), with every man his censer in his hand, and a thick cloud of incense went up."

Here we have clearly animal worship. But how can we conclude that these animals were regarded as ancestors or totems? Professor Smith points to the name of the officiating priest in these idolatrous rites, Jaazaniah ben Shaphan, "son of the Coney". Now, the Coney, or rather Rock badger, was an abominable beast of the Hebrews, one regarded with religious horror by true Israelites (Lev. xi), and therefore might have been regarded by religious veneration by idolatrous Jews, and it seems to be implied in this passage of Ezekiel that all the elders of Israel, *i.e.*, the chiefs of the clans, had similar totems. It seems possible to suppose that the troubles which had befallen the Israelites had sent them back to the superstitions of old, and caused a reversion to totem-worship. All turns upon the name "ben Shaphan". If this is a family name, we have here a connection, the one hitherto wanting, between animal worship and family organisation. We have worship of animals and families with animal names combined together. We must, however, remember that in the first place it is a vision. Then, as regards the name "ben Shaphan", it is either real or fictitious. If real, we can explain it with tolerable ease in accordance with the ordinary Hebrew usage, as referring to the name of Jaazaniah's father, and not his family. We know of at least one Shaphan of the preceding generation, the well-known scribe of Josiah (2 Kings xxii), who was certainly no totem-worshipper, and who might naturally name his son "Jaazaniah" (*Jah will hear me*). If the person mentioned by Ezekiel was a real person and a son of this Shaphan, we can easily understand why the prophet selected him as a typical figure. Here was the son of one of the principal figures in the Jahvistic reformation of Josiah's reign turning to idolatrous practices. If, again, the name was invented by the prophet—as is more likely, since real names of persons occur most rarely in the book—I think we can explain it better as a piece of irony than as a reference to any family connection with this worship of animals. The prophet calls the officiating figure Jaazaniah (*Jah hears*) ben Shaphat (son

of the Coney), to emphasize the contrast between the true and the false worship. He is called "Jaazaniah", "God hears me", and yet he is a "son of the Coney", or worships the coney, for *ben* is used in a very wide sense in Hebrew for a member of a guild or a worshipper of a god, as the well-known "sons of Belial". It is something like an author of a political satire nowadays calling a Tory who had turned Radical "William Ewart Disraeli", or a writer inveighing against fox-hunting parsons naming a typical figure "Rev. Theophilus Reynard". And again, as regards the source of the animal worship mentioned by Ezekiel, the other kinds of idolatry mentioned in the eighth chapter are in each case extraneous, the image of jealousy[1] being probably Canaanitish, the worship of Tammuz certainly Phœnician, and that of the sun being possibly a Persian importation. It seems natural therefore to assume a foreign source for the remaining form of idolatry, animal worship. Now we know the wide extent of this kind of idolatry in Egypt, and exegetists have hitherto taken our passage to refer to this especially, as it is particularly mentioned in ch. xxiii that Judah had gone back to the idolatry of her youth, "wherein she played the harlot in the land of Egypt" (Ez. xxiii, 19). I do not see sufficient reason, therefore, in the mere presence of the name ben Shaphan for departing from this usual and natural interpretation. It seems to me most unlikely that we should find the prophet referring to totem-worship in its strict sense unless we found other signs of the totem-organisation widely spread among the Israelites of Ezekiel's time.

IV.—Forbidden Food.

But Prof. Smith has not exhausted all his resources in laying such stress, and, as I think, unwarranted stress, on the name of the imaginary officiating priests at Ezekiel's imagined temple-rites. One of the characteristics of the totem-organisation is the fact that the totem animal is regarded as *tabu;* it must not be eaten except in some instances eucharistically as a religious rite. Now we find distinct reference to the eucharistic use of what the Israelites call "unclean animals" even as late as the second Isaiah, 100 years later than Ezekiel. This prophet speaks of men "which remain among the graves and lodge in the monuments, which eat

[1] Dr. Neubauer has suggested that the סמל mentioned here is a proper name, the prototype of the Greek Semele (*Athen.*, Sept. 19th, 1885). He was anticipated by St. Jerome (*Onom. Sacr.*, ed. Lagarde, p. 58) in taking the word as a proper name.

swine's flesh and broth of abominable things in their vessels" (Is. lxv, 4); and again, "they that sanctify themselves eating swine's flesh, and the abomination, and the mouse" (*ib.*, lxvi, 17). Prof. Smith points out that both swine and mouse occur as proper names. But the former, *Hezir*, is used only of a priest, and of a covenanter of Ezra's time, who cannot be connected with totem-worship, and *Achbor*, or mouse (*cf.* the Roman family of *Mus*), is used of a King of Edom of early date where we have seen totemism to be most probable, and in Israel only of one of Josiah's friends, who was certainly unconnected with totem-worship. It cannot, therefore, be regarded as proven that the sacrificial use of swine's flesh was consciously connected with any tribal arrangement at the time of the second Isaiah, though it is possible that it was in some way a "survival" of an earlier organisation of the kind.

Prof. Smith sees a whole series of such survivals in the well-known lists of forbidden food in Lev. xi and Deut. xiv. Let us see what this assumption involves. It implies that at an early period, say before the Exodus, the Israelites were organised on the basis of families or clans tracing through the mothers, and called after her *Hezir* (swine), *Achbor* (mouse), *Aiah* (kite), *Arod* (wild ass), *Shaphan* (coney), and so on, each of the clans refraining from eating the totem-animal. Thus in a polygamous family it might happen that there were members of all these clans in one family which would therefore abstain from eating all the animals mentioned. As the totem-organisation declined, the origin of this abstinence would be lost; but the custom of abstinence by the natural inertia of customary procedure might last on, and a natural horror be developed against eating these particular animals. When the legislation was codified these customs might well be incorporated in the code, and raised, as it were, to a higher power by being connected with a purer worship. The Jewish theory of sacrifice as interpreted by Maimonides recognised that something of the same kind was done in the case of sacrifice, as a kind of concession to human weakness. It is, therefore, impossible to deny that the *tabu'd* food of the Israelites may show survivals of totem-organisation. The hypothesis would certainly explain certain anomalies in the list, notably the presence in it of the Coney (or rock badger), for which no plausible explanation has hitherto been given. The division into clean and unclean by the two tests of cloven-foot and rumination would then be a later induction from the animals regarded as *tabu*: this is, to some extent, confirmed by the want of any such systematisation in the list of birds given Lev. xi, 13-19. All this is extremely

ingenious, and is by far the most plausible explanation given of the seemingly arbitrary solution of forbidden food, and at the same time of the religious horror with which the "abominations" were regarded. But, here again I fail to find evidence of the actual existence in historic times of the connection of tabu and totem required by Prof. Smith's hypothesis. The evidence from names is rather against than for the hypothesis, the whole category of plant-names, so frequent as totems, is absent from the Levitical list. Indeed, taking the 85 separate names contained in our list, I find 43 of these "clean" as against 42 "unclean",[1] showing at least that the connection, if it ever existed, had been forgotten in historic times:—Zimri, the Chamois; Jonah, the Dove; Epher, the Hart, Ezra's son, could have no connection with totem, since neither Chamois, Dove, nor Hart are taboo'd. Nor would it be impossible to explain the whole list as being rather the rough induction of folk-medicine collected by the priest, who combined in ancient times all the learned professions, including medicine. This latter explanation would, however, not account for some of the anomalies of the list, especially that of the coney, and would also fail to account for the religious aversion which must have existed prior to the compilation of the list. I think it, therefore, not unlikely that the list of forbidden food contains in it some survivals of the old totem-worship and totem-clan organisation, though I am unable to agree that they are in historic times anything more than survivals, resembling the case of the horse in England, which anthropologists say we do not eat because it was once sacred to Odin, and thus *tabu'd*.

V.—Tattooing and Clan Crests.

Another mark of the totem-clan is, that the members of the clan bear the totem tattooed on their skin. Can we trace signs of this in the Old Testament? We have here the negative evidence that it was forbidden in the Levitical legislation (Lev. xix, 28), "Ye shall not make any cuttings on your flesh for the dead, nor *print any marks upon you.*" Most of the parallel passages (Deut. xiv, 1;

[1] The following table gives the distribution of the personal and town names, according as they are "clean" or "unclean". Only those town-names are reckoned which do not occur among persons.—

		Clean.	Unclean.
Animals	Persons	14	30
	Towns	3	1
Plants	Persons	15	—
	Towns	2	—
Birds	Persons	5	2
	Towns	—	—
Reptiles	Persons	3	7
	Towns	1	2

In all, 43 clean against 42 unclean, of which there are 37 of former and 39 of latter applied to persons.

Jer. xvi, 6; xli, 5; xlvii, 5; xlviii, 27) seem to show that this cutting was chiefly done as a sign of mourning. But the "printing of marks" seems to have been different, and to be more of the character of tattooing, the קצקצ being probably a caustic. There seems to be some reference to this in Isaiah xliv, 5—"Another shall inscribe himself *by his hand* unto the Lord", and perhaps in the "mark" that was to be set upon true Israelites in Ezekiel ix, 4 (cf. Gen. iv, 15, "mark of Cain"). It has even been suggested that the "mark on the hand" and the sign "between your eyes" (Exod. xiii, 9) were either originally tattoo-marks, or that the phylacteries were adopted to wean the Jews away from this practice. Mr. Herbert Spencer (*Prim. Sociology*, p. 364) has suggested an explanation of the difficult passage, Deut. xxxii, 5—"They have corrupted themselves, their spot is not the spot of his children" (A. V.), which would bring it in connection with our subject. He suggests that the poet's complaint was that they had tatooed themselves with a mark of another god. He seems to trust here too much to the Authorised Version, which makes more sense out of the passage than really can be found in it. Literally, the words run, "Corrupted unto him, not his sons their spots"—whatever that may mean.[1] That the practice of tattooing was carried on among Semites seems to be shown by the fact that it still exists among the Cabiles (L. Geiger, *l. c.*, p. 177), and that at the time of Ptolemy Philomator apostate Jews were ordered to be branded with an ivy-leaf in honour of Bacchus (3 Macc. ii, 29). And everyone will remember the mark of the beast in Revelations, where it is clearly used in a religious or idolatrous sense. But there are no indications of a direct relation between tattooing and totems, and here again we find at best only "survivals".

Clan Crests.—The totem serves as a rallying sign for the *gens*, hence it is only natural that it should be used as a crest or standard in war time. The Israelites, we know, had standards (Num. i, 52; ii, 2 *seq.*; x, 14 *seq.*), and the Rabbis have given detailed accounts of the crests of the tribes[2] (cf. Winer, *Realworterbuch*, s. v. *Fahne*).

[1] On the whole subject cf. L. Geiger, *Z. D. M. G.*, 1869, 166 *seq.* Kalisch *Lev.*, ii, 429-30. The Arabs still have sacred marks on their faces. The late "Mahdi" had them; cf. J. Darmesteter, *The Mahdi*, p. 111.

[2] Mediæval heraldry made out elaborate coats of arms for the various tribes, and they are figured down the dexter side of the title-page of the *Editio Princeps* of the Authorised Bible, 1611. As specimens, I may quote Fuller's quaint descriptions (*Pisgah Light*): Zebulon, "a ship *argent*, with mast and tackling *sable*"; Simeon, "*gules*, a sword in pale with the point thereof ended *argent*"; Issachar, "an ass couchant *argent*, in a field *vert*." Cf. *Fort. Rev.*, l. c.

These were in all probability derived from the animal metaphors contained in the blessings of Jacob (Gen. xlix) and of Moses (Deut. xxxiii). In the former, Judah is compared to a lion, Issachar to an ass, Dan to a serpent, Naphtali to a hind, Benjamin to a wolf, Joseph to a bough. In Moses's blessing only four of these comparisons occur—Ephraim to a bullock, Manasseh to a bison, Gad to a lion, and Dan to a lion's whelp. The temptation is strong to take these for the leading totems in each tribe; and this suggestion is particularly interesting, because it was on this that McLennan argued for totemism among the Israelites, ten years before Professor W. R. Smith (*Fort. Rev.*, 1870, i, p. 207). Unfortunately, the lists disagree, Dan being a serpent in Jacob's blessing, a lion's whelp in Moses's; it is possible that the head clan in Dan had changed from one with a serpent to another with a lion's cub in the interval. But the natural imagery of poetry will explain all the circumstances of the case without any resort to the totem hypothesis.

VI.—Blood Feud.

To conclude our investigation, we must consider the practical side of the totem-clan organisation. The utility of this arrangement in ancient times was, that a man would find almost everywhere he went kinsfolk who would take his part in any quarrel, avenge his death, and support his children if he were killed. A tribe composed of families made up of totem-clans could not be dissolved, since in each family there would be members of the different clans, and all that tended to keep family life together would aid the consolidation of the tribe. The blood-feud, or *vendetta*, is represented in the Pentateuch by the "avenger of blood", whose functions are only referred to as well known in ordinary cases, the law treating of the exceptional circumstance of an accidental homicide (Deut. xix, xxi; Num. xxxv). But we know from the charming idyll of Ruth of another function of the *Goel*, or "near kinsman", to marry the childless widow of his kinsman, as Boaz, the kinsman of Elimelech, did for Ruth, the widow of Mahlon, Elimelech's son. Here we have a tie of kindred, but it is reckoned through the male line, and there are no signs of a connection with totemism.

Thus, throughout our inquiries we have found phenomena in the Biblical records which may be regarded as "survivals" of totemism, but not of the actual existence of the totem-clan itself. Professor Smith's specific instances of David as a member of a

Serpent clan, and Jaazaniah ben Shaphan surrounded by creeping beasts and abominations, and all the "totems" of the house of Israel, we have had to reject as based on insufficient evidence, and having no weight against the great *à priori* improbabilities of totemism in its full force existing among a people in the main agricultural. On the other hand, we have seen indications like the arrangement of the Israelite clans (Num. xxvi), the forbidden food of the Hebrews (Lev. xi), tattooing (Lev. xix, 28), and the existence of animal names among them, which may be regarded as "survivals" of a previous totemistic organisation among the Israelites before their entry into Canaan. We have also seen a great probability of totemism where we should be more prepared to find it, in the nomad tribes of Edomites and Horites. Thus this, like many other lines of contemporary investigation, points to an early identity or connection of the Israelites and the nomad tribes of Edom, such, indeed, as is expressed in the Biblical records, which make them all *B'nê Abraham*, or in the triumphal opening of Deborah's song—

> "Lord, [when] thou wentest forth from Seir,
> Thou marchedst out of the field of Edom."

We may then give a definite answer to the question we have set ourselves, *Are there Totem-Clans in the Old Testament?* by saying—

(1) If anthropology teaches that the totem arrangement is a necessary stage of national development, there are sufficient indications of such arrangement in the names of the Edomite clans (Gen. xxxvi).

(2) There are sufficient "survivals" of totemism in the names of the Israelite clans, their forbidden food, personal names, tattooing, family feasts, and blood avengers, to render it likely that they once had a totem organisation like the other *B'nê Abraham.*

(3) But there are not any signs of the actual existence of totemism in historic times among the Hebrews, such as Professor Smith contends for in the cases of David and the crucial passage, Ez. viii, 11.

JOSEPH JACOBS.

THE EARLY CHURCH DEDICATIONS OF THE SOUTH OF SCOTLAND.

THE article on the dedication of churches in the *Archæological Review* for December 1888 seems to me a decided step in the direction of making available a very important class of historical indications. The statistics are only to be had for certain counties as yet. But the points I wish to call attention to at present are, first, that one church has often had several successive dedications, and secondly, what the different classes of dedications imply.

The practice of re-dedicating an existing church, or church endowment, to a fresh saint had probably nearly ceased in the centuries immediately before the Reformation, when records in writing were too full to be easily set aside. There is no doubt much truth in the explanation the author of the article in question gives of the fact that certain saints who were in great repute seldom appear as patrons of churches, namely, that after the early Norman period England was pretty well furnished with churches, so that whatever excellence architecture was destined to attain to, new foundations were not very common, comparatively speaking; in short, the earliest saints got the most dedications. So that, whatever exceptions may exist, the history of dedications in Britain concerns chiefly the period between the Romans and the Normans, overlapping a little at the end of one and the beginning of the other period. This is the period for which dedications are useful for historical purposes. The latter part of it at least is very much more obscure in Scotland than in England, partly because the history was intentionally falsified for political reasons, for since the older documents have been looked for in the proper places they have been to a certain extent forthcoming. But in the south of Scotland, where four or five different races were fighting and driving each other back and forward for centuries, the dedications stand out with great clearness compared to other historical indications.

Scotland has one dedication that belongs to the Roman period, that at Whitherne, or Candida Casa, in Galloway. St. Ninian, the founder, who, wherever else he had been on the continent, had been under St. Martin at Tours, was building his church or monastery

at the time he heard of St. Martin's death, and he *dedicated his church to him.*

Here, I think, we have at the outset the theory of these early invocations. I do not know that it needs much explanation, but it was made clearer to me by what Mr. Wirt Sikes says in his *British Goblins*, on the subject of ghosts, and the beliefs regarding the relations of the living and the dead—I have not the reference, but the value of the book is not of a kind that can be tabulated—he says he is inclined to think that the belief that the dead have acquired *new powers of hurting* is at the bottom of the Roman injunction to say nothing but good of the dead! It does seem to want some explanation. And at all events, I am tolerably certain that the converse belief is at work here—the church, and in this case the community, were put under the protection of some good man who had passed into the unseen world; perhaps the more recently the better.

It can only have been the monastic system that Ninian introduced into Scotland; his history mentions churches as existing already in Britain, and as far as Scotland was part of the Roman Empire, it would be Christian, like the rest of it, after the time of Constantine, and the coins, up to the time of Honorius, found on the line of the northern wall correspond with the general probabilities that that was held at least by the Romanised Britons until the final departure of the legions. The statement about the churches is, that Ninian had obtained masons from Tours to build his church, the churches previously in the country having been of wood. Now this, in a life written long after the Iona school had introduced wooden churches from Ireland, is probably a very natural mistake; it is difficult to imagine a time when stone was not used for building in Scotland, and the Whitherne monastery was called Candida Casa, the White House. And Tigh Geal, White House, is used in the Highlands at this day for a house of stone and lime: Tigh Dubh, or Black House, meaning a house of stones and turf. The *shells* of the Galloway shore are mentioned as a valuable deposit in the seventeenth century, so I have no doubt the shell-lime, not the stone, was the novelty in the district. The old chapels in the Hebrides, when not of dry-stone, are built with shell-lime. What suggested the meaning of Candida Casa to me was observing the old spelling Duchoir, or Black Church, for Dewchar, the site of the present parish church of Yarrow, also called the Forest Kirk.

The exact date of the foundation at Whitherne is not so certain as at first appears from its coinciding with the death of so

eminent a person as St. Martin. Mr. Skene gives the date of that event as 397; I see it stated by one writer as "about 400", which is not only a convenient enough general statement, but may be from the same indications as the other; another makes it 412; while—which is important in quite a different way—*the Saxon Chronicle makes it as late as* 444. Now this is very near the date of the famous letter to Ætius, consul for the third time, "the groans of the Britons", which has, since Bede's time at any rate, been generally supposed to have been written on the invasion of England by Hengist.

This has been doubted before; but Mr. Skene points out that that event seems to correspond in all respects with the calling in of the barbarians by Gerontius, in the last years of the fourth century; and I infer, from the date given by the *Saxon Chronicle* for the death of St. Martin, that it took place in the same year as the landing of Hengist in England! Mr. Skene's dates for the two events, in fact, corroborate one another. I further see a philological indication of how Gerontius became the Vortigern of legend. In the list of the cities of Britain attached to *Nennius* the name of Caer Guorthigern occurs. With Gerontius in view, this seems to contain a reduplication; the older name has been Garth Geraint, the Garde of Gerontius; while with Caer added, Guorthigern looks like a personal name. The "Garde" of chivalry seems to be at least as much a Welsh as a Teutonic word.

Perhaps the most important datum for early history, however, of all connected with this old foundation is that two at least of the abbots are called "Nennio" (*see* Mr. Skene's *Celtic Scotland*, vol. ii, p. 49). It is so evident that they were so called as successors of St. Ninian that this explains who, or rather what, *Nennius* was. I should infer that the whole collection of documents which goes by that name was made at Whitherne. The name of Mark the Anchorite, has come down; some say he was the original Nennius, and others, the continuator. This theory as to Nennius has been placed beyond doubt by the discovery of a document in the *Book of Armagh*, in which "Patricius" is mentioned as the designation of the Archbishop of Armagh, in the 7th, or more likely, in the 8th century. (*See* Stokes' *Ireland and the Celtic Church.*) It was so evident that there must have been more than one Patrick—Dr. George Petrie's instinct perceived as many as seven—that the establishment of the position and authority of Nennius is really the more important result of the two.

The earliest date in the *Saxon Chronicle* which seems to be

reliable is the coming of Ælla, the father of Edwin, to Northumbria in 540; his family and that of Ida, who followed some years afterwards, are so important historically, that it is likely to be a real date. But the Abbot of Whitherne gives notices of events before this, back to the leaving of the Romans; and further, as to the manifestly fictitious early history of Britain, I am not at all sure it has not been made up in the Roman period in Britain, from the turn it takes; which, though it would not add to its credit as history, would put it on a different footing from a document made up, say, in the 10th century.

The Angles of Northumbria obtained possession of Galloway in the seventh century, and established a Saxon bishopric of Candida Casa. And though it had long been part of Scotland when David I. reorganised the Church, on lines which show that his object must partly have been to obliterate the contending nationalities within the kingdom, he placed his new bishopric, for such it was in effect, under the ecclesiastical jurisdiction of the Archbishop of York. The Archdeanery of Teviotdale, in the south-east of Scotland, had been given up to him by Durham, as part of the old diocese of Glasgow; while, by bringing the English Church into his outlying territory of Galloway, he would obtain important assistance in civilising the wild Gallovidians.

It is most probable that the early monastery was not at the site of the mediæval church, but on the Isle of Whitherne, judging by the analogy of other cases, for there is apparently no tradition of this. If I am not mistaken, the isle is a peninsula, often separated from the adjoining coast. The name of St. Ninian's Cave had always attached to a cave on the shore, not very far off; but it is only recently that it has been discovered, the sides are marked in several places with crosses of different rather artistic designs. There are traces of, probably, earlier habitation in the cave, but it is even possible that it really was Ninian's place of retreat, or Diserth; this was almost a regular institution, and does not imply the monastery was not built when the cave was in use. As to the Saint himself, his name is certainly Roman, whether given by Romanised British parents or assumed as a monastic name. The name occurs in at least one inscription in Grüter. He is said to have been the son of a British prince; and it does rather seem likely, from all the circumstances, that he had family influence; but his father's name is not given, and, generally speaking, the accounts of their origin are the parts of the lives of the British saints I look upon with most distrust. In Ireland, as is now known, from the printing

of the old Irish laws, the abbot of the monastery was almost as much a part of the clan-system as the chief himself. (See *Celtic Scotland*, vol. ii, p. 67 and following.) He was elected within what must have been sometimes narrow limits, and if no ecclesiastic could be found in the family of the chief (or, as was the rule in some cases, in that of the actual founder), the "outsider" who had to be elected as the head of the monastery did not have the administration of the endowments. There are two things to be said in favour of this system, first, that it certainly, in many cases, produced good men; in fact, as long as the spirit of the founder animated the community, and until that became secularised, hereditary training and associations would naturally produce a higher class of men and work than could be obtained by any system partaking of the nature of "cramming". Secondly, it was probably impossible the Church could have worked in any other way in Celtic Ireland, when Christianity had once been finally adopted by the chiefs and people.

And it seems to me that the histories of the saints of Great Britain have generally been composed under the influence of the Irish Church, as no doubt they would be to a great extent, and the circumstance of royal descent added as a matter of course; in some cases one can imagine it being done in good faith; an Irish monk would suppose, as a matter of course, that the abbot must have been a relation of the local king. On the other hand, when a man's pedigree was his title-deeds, as Mr. Skene says with regard to the partition of the tribe-lands, a fictitious pedigree was not altogether an easy thing. And while the system as to landed property belonged rather to a certain stage of agriculture than to any particular race, it is impossible to suppose anything like the unbroken clan-system of Ireland, and in some degree of the Highlands, can ever have existed in England or the Lowlands after the Roman occupation.

Besides the Romans and the early Saxons there were three different Celtic races at least in Scotland, where institutions certainly differed in some ways. The Abbot of Iona came regularly from Ireland, as the qualification was to be a descendant of Conall Gulban, who was a real man, although it is not necessary to believe he went through all the adventures related of him in Mr. Campbell's Gaelic tales, where he appears as the Gaelic representative of Ulysses and Sindbad. Columba had been one of his descendants. They belonged to the race of the Scots, who, though they were apparently the principal stock of the Irish Celts, never were really

very numerous or powerful in Scotland. In fact, Mr. Skene's demonstration that the Picts were the main ancestors of the Scotch Highlanders, though their original dialect was probably more different from Irish Gaelic than the modern language is, is the only way of accounting for their appearance, as has been well said, everywhere and nowhere in Scotland, and for the Gaelic names which are numerous up to the English border, and beyond it. While, if we suppose the Picts to have been the people who called themselves *Man*, the name which remains in so many localities, and that the name dropped, as it naturally would, when they came in contact with the Saxons, or at least when they allied themselves with them, as they did; it further helps to account for their sudden disappearance when Kenneth, son of Alpine, a Scot of Dalriadia by descent, conquered the Pictish kingdom, the father having the royal Pictish name of Alpine probably indicates that his mother had been a Pictish lady of the royal family.

The name of Pict was retained much longer in Galloway than elsewhere, and it is as well to understand, when St. Ninian is called the Apostle of the Picts, that those of Galloway were quite divided from the kingdoms of the Picts, which lay north and south of the Grampians; Cumbria stretched through the centre of the country, from the Cumbrian Derwent to beyond Dumbarton; and north of the Firth, in the promontory of Cantyre particularly, was the territory of the Dalriad Scots. It is said in the story of the Sons of Uisneach that they conquered all there was of Alban, Scotland, northward from Manau, and as they were Irish invaders of Argyleshire, this shows that Galloway, with Ayr and Renfrewshire, was probably called Manau, as well as the Pictish territory of Meath in Ireland, while Manau Guotodin, Manau of the Otadini, in the east of Scotland, I would not restrict to Slamannan, as Mr. Skene does, but make it identical with the varying extent of the political "Lothian". There is next to nothing known about Ninian himself, but the assertion that he was a Briton by descent is probable, (though one account makes him an Irishman, probably by the same sort of conventionality which makes him a king's son).

Galloway was certainly more or less under British rule; the King Caractacus and King Galdus of Galloway tradition, and the romantic historians of Scotland, are apparently Caradoc and Gwallawg, Men of the North, or Cumbrian nobles, who were in the same relation of uncle and nephew. Gwallawg is dubbed by Geoffrey of Monmouth *Earl of Salisbury*, from which I infer that he had in-

herited some fortress in Galloway, which was then known as Caer Caradoc, Caer Caradoc being the Welsh name of Salisbury!

The dedications to Ninian, I think, are mainly on British ground; the village of St. Ninian's and Ringan's Well are at Stirling, formerly Strivelin, the Yellow Strath.

Bishop Forbes gives a list of more than sixty places in Scotland and the islands where the name occurs, some in Aberdeenshire and further north. Of course these do not all indicate separate churches, as any farm belonging to an ecclesiastical foundation was apt to be called after the saint's name. His authority for Ringan's Dean is the *Origines Parochiales.*

I have not succeeded in verifying the name of Ringan's Dean, given by Bishop Forbes at Bowden, on the south slope of the Eildon Hills, but the old church stands in a narrow valley, and it is likely enough the early church of Both-Eildon had this dedication. I mention this particularly, because the Eildon Hills would seem to have been on the frontier of Cumbria to the east. The name of Ninian becomes Ringan in the Scotch vernacular, Ronan in Gaelic, and Renan in the Cymric of Brittany. While I think I detect it in the female names Monenna and Ninoca; the latter, I observe, has been turned into St. Nun. *Mo*, my, and *og*, a sort of Gaelic diminutive, in this case are really the Gaelic substitutes for "saint". There is at least one St. Ronan, a namesake.

Though the great St. Patrick is said to have been born at Dumbarton (he was certainly Cymric), and stands out in Church history as very much of a real man, he does not much concern Scotland, except through the Columban church. Besides the church of Palladius, at Fordoun in Kincardineshire, the name, at least, of Kilpallet remains on the borders of Berwickshire and Haddingtonshire, or East Lothian, with another name near it which shows the dedication had been succeeded by one of the Iona church—Kilmad—Kil-Mo-Aed, or the church of St. Aidan. Palladius seems to have been one of the "Patricks", and it is perfectly imaginable that if he came straight from Italy to the Scots and Picts, he did not get on with them, whether they really martyred him or not.

An early saint who is much more frequent in Scotland, is St. German, who commonly appears under his real *Teutonic* name of Herman. There is an actual Hermanfield near Haddington, and near the old hospital of St. Germans, and both were probably connected with the chapel of Herdmanston, pronounced Hermiston; while *Wolfstar*, in the neighbourhood—sæter or farm—looks as if the dedication had been to Germanus and Lupus, whom the Saxons,

when they made their way into Lothian, would recognise as Herman and Wolf. There are several Hermistons in different parts of the country. But I was rather surprised to find that the saint is called Herman in, I think, two out of the five old Latin lives published by the Bollandists. His date is, of course, long before that of the Franks and Burgundians, and though there were Teutonic settlements in Gaul when the Romans first invaded it, the circumstance has been so little noticed that Grimm, genius as he was, is puzzled about the identity of custom shown in Germanus' hanging up the heads of the game he killed, in his secular days, on a particular tree, with the sacrifice of horses' heads, by hanging them on the trees, by the Germans after their great victory over the Romans.

What rather complicates the matter is that the name of the tribe, the Catti, has a Celtic sound ; but they were certainly fighting for, and as, Germans, and, on the other hand, Herman and Wulf are clearly Teutonic names. In truth, I believe there was no inevitable animosity between German and Celt ; and even in England, that between the Saxons and Welsh has certainly been exaggerated. In any case, the practice of hanging up the heads appeared to the bishop so decidedly pagan, that, in the absence of Germanus, he had the sacred pear-tree cut down. Apples are sacred or mysterious in the legends of nearly the whole old world, but I do not know of any other pear-tree particularly honoured.

The quarrel with the bold bishop which followed—Germanus is said to have been "dux" over the sixth part of France—and the great man's renouncing the world and entering the Church, resemble a story in the history of St. Martin, but not sufficiently to discredit either narrative. Germanus has a good deal of personal character, and the fact of his mission to Britain has never been doubted. Whether his going to Britain, as Bishop of Auxerre, along with Lupus, Bishop of Troyes, in 429, was entirely to combat the Pelagian heresy, or whether it was intended in a general way to strengthen the Church of the deserted Britons, they must have known they were taking their lives in their hands.

The story of the Allelujatic Victory, when the invading army of Saxons and Picts, who had interrupted the Easter baptism, were terrified by the shouting of the choir, and fled so precipitately that some of them were drowned in the water where the baptism was being performed ; and Germanus's readiness in danger, and knowledge of what was likely to affect the nerves of a barbarian enemy, are all consistent with his having been a soldier ; but Lupus was

certainly equally fearless; there are notices of him of extreme interest in Hodgkins' *Italy and her Invaders.*

A good deal of ink has been shed over the question of the locality where this happened; Whitaker wrote a large book to show that the place usually supposed, on the small river Alun, near the town of Mold, in Wales, had never been connected with it at all till the 17th century, and shows pretty distinctly that the identification originated with a dilettante clergyman of the neighbourhood, in the time of Charles I. After taking some trouble to see the locality, I do not think it is so entirely unlike the place required as Whitaker makes out; but the Maes y Garmon, or Field of Germanus, where an obelisk was put up in the last century, is a rising-ground among pasture-fields, at some distance, perhaps a third of a mile, from the nearest part of the river, and much more than that from the pretty wooded valley which closes it in higher up. I should say these fields had belonged to Llanarmon, in Yale, probably the nearest church of St. German, among the hills in which the Alun rises.

What makes the story so important for British history is the appearance of the Saxons, with certainty, in 429; their being in alliance with the Picts is nothing strange, for in the north they generally acted together, as long as both remained heathen, against the Britons and Scots, who were Christians. There are indications of a settlement of Saxons among the Picts, beyond the northern wall, not only before the Groans of the Britons, but before the Romans finally left the country. So, in fact, this circumstance goes to show the truth of the story.

Though Whitaker calls his book *The Ancient Cathedral of Cornwall,* I do not think he commits himself to any locality in Cornwall or elsewhere; he may or may not have felt that the Picts were not likely to appear in Cornwall (or, by land, the Saxons either), especially so suddenly as to take everybody by surprise. But it is impossible to say how he would have liked my deduction from his own suggestion, that the series of rude works in Roxburghshire and Selkirkshire, called the Catrail, or Picts' Work Ditch, has been the frontier of Scottish Cumbria; the deduction is, that the place, of all others, likely to be the scene of the Allelujatic Victory is the Herman Law, above Chapelhope, at the head of the Loch of the Lowes, the smaller lake above St. Mary's Loch in Selkirkshire. The mediæval dedication of the chapel seems to have been St. Lawrence, but it is quite probable there was an earlier one. The essential point is the road leading through the hills into Cumbria

and part of the Yarrow valley, lower down, retains the name of Annan Street, the road into Annandale. There is water enough to drown any number of armies in the two lakes, but it is the short length of river, connecting the two lakes, that an enemy flying to the eastward would try to cross, and if flooded, it would be dangerous, with the deep lower lake below. This river would be crossed on the way to Hawick, some five-and-twenty miles to the east; and the slogan, or gathering-cry, of the town of Hawick in later times was "Terribus and Terri Odin"; which is now interpreted as an invocation to Tyr and Odin. And we know, from Kentigern's preaching against him (as the deified ancestor), that Odin was worshipped by the northern Saxons.

The Picts I suppose to have been the native Otadeni or Gadeni of the south of Scotland, Caledonians or people of the woods; for *Goden* is an old Welsh word for *wood;* indeed, I believe it to be quite as much the ancestor of the English word as the German "wald" is.

I am far from thinking there were no Picts in England, but it is before the Roman occupation that they are traceable; as Dr. Angus Smith pointed out, all the more primitive inhabitants of Britain would naturally enter it by the south-east corner, where it is in sight from the continent. Two races of Britons are very distinctly indicated in Essex, and they seem to have been Gael and Britons, living under one government. The Ptolemy of 1535 has a Petuaria or Pictary that corresponds to Manningtree, north of Colchester, and from Scotch analogies this should be Tref-Mannan, the township of the Picts. The Stour, upon which it stands, is a Welsh *ys dwr*, "the water", while the Colne has probably really the same name as the Colwyn in Wales. Pictsbury Rampart is probably named, as far as the present use of the name goes, from the Domesday owner of the land to the west of Colchester, Roger Pictavensis, Roger from Poitou.

But, on the other hand, it is so evident that Bunduica, of which Boadicea is the current corruption, means the Woman Leader, being nearly the same as the modern Gaelic word for *duchess*, "Ban-diuc", Woman-Duke, that one can only wonder it has not been noticed before. She wore tartan robes, and I imagine the tartan has something to do with the name of the Picts; their historical name in Gaelic, Cruiney, meant "colour". Tattooing was too general to account for their distinctive names, as Hill Burton remarks, and as had, indeed, been remarked before his time.

H. Russell.

ROMAN REMAINS.

No. 7.—LINCOLNSHIRE.

NOTE.—Works consulted, with Abbreviations chiefly used :

Allen's *History of Lincoln*, 1834, 2 vols.
Arch. Journ.—Journal of the Archæological Institute, vols. i-xliv.
Assoc. Journ.—Journal of the British Archæological Association, vols. i-xliii.
Arch.—Archæologia, vols. i-l.
Camden.—Camden's *Britannia*, Gough's ed., 3 vols.
Carter's *History of England.*
Celt, Roman, and Saxon. Thomas Wright, 1852.
Coll. Ant.—C. Roach Smith's *Collectanea Antiqua*, 1843-80, 7 vols.
G. M.—Gentleman's Magazine.
Horsley's *Britannia Romana*, 1732.
Hübner.—*Corpus Inscriptionum Latinarum.*
Proc. Soc. Ant.—Proceedings Society Antiquaries of London.
Notes and Queries.
Stukeley's *Itinerarium Curiosum.*
Thompson's *History of Boston, Lincolnshire.*

LINCOLNSHIRE, a maritime county, second only to Yorkshire in extent, abounds in Roman remains. In early days it was populated by the Corativi or Coriceni, an aboriginal race, who also included in their territory the neighbouring counties of Northampton, Leicester, Rutland, Nottingham, and Derby. Originally they sprang from Germany, and afford an illustration of those migrations of the Belgic race which are strikingly referred to by Cæsar in his description of Britain ; they had, in association with the Iceni, sought alliance with the Roman Government, but, while submitting to the Imperial power, they adhered to ancient traditions and native customs, occupied the woods and forests, and cherished their independence.

The land comprised in the district known as the Fens was in early times covered by stagnant water. It was simply due to the marvellous skill and industry of the Roman colonists that so large an area became reclaimed. The waters upon which the canoes of the aboriginal tribes had once been steered, were directed to other channels, the land was drained, and protected by stupendous banks. As an illustration of the results achieved, it may be noted that the towns of Boston, Spalding, and Wisbeach could not have otherwise

existed; the influx of the spring tides would have precluded anything like building operations. It has been computed roughly that the construction of these banks, extending as they do for nearly 150 miles, require as much material as would, upon an average, be employed in making an English railway 200 miles in length.

The Car Dyke, the Foss Dyke, and the Westlode, to which ample reference will be found in the Index, represent these wonderful embankments, reared for the protection of the marsh lands from the inroads of the sea. The former covered a range of some 40 miles, was 60 feet in width, and upon it were erected forts at no less than seven places, Northborough, Braceborough, Billingborough, Garnick, Walcot, Linwood, and Washingborough. These triumphs of engineering skill were carried out under the direction of Catus Decianus, the Procurator stationed in Britain in Nero's reign.

Lindum or Lincoln was the capital, and one of the nine colonial cities which flourished in this province when vacated by the Romans. Lincoln is included in *Britannia Flavia*, which comprised the middle portion of the island, from the Thames to the Humber and Mersey. Its name, derived from *Lhin Dun*—"the forts by the pool"—became Latinised as *Lindum*, and from *Lindecollina* and *Lindo collyne*, to be found in later annalists, the transition is easy to Lincoln.

The Castle stands upon the hill, on the site of the Roman Castrum; the more ancient portion of the town, upon the lands reclaimed in the valley.

In the *Itinerary* of Antoninus, Lindum first appears in connection with the fifth iter, a line of road running straight from London to Carlisle. It is placed between Causennæ (Ancaster) and Segelocum or Littleborough, on the road to Danum (Doncaster). Again, in the sixth iter, which, starting from London, conducted the traveller to Lincoln, passing on the way Verulam (St. Alban's) on to Ratæ, the modern Leicester, Ad Pontem (Farndon), by the river Trent to Crocolana (Brough), and thence to Lincoln. In the eighth iter it is again mentioned on the line of road reaching from Eburacum (York) to the metropolis. In this journey it appears between Segelocum or Agelocum (Littleborough) and Brough. Another way ran from Lincoln to York. It proceeded from the former city to a station on the river Humber (Ad Abum), said to survive in the modern town of Winterton. Thence the river was crossed and a station reached, viz., Ad Petuariam (Brough) on the Humber, a site where many antiquities have been found.

Among the Roman remains at Lincoln, one of the most interesting is the Newport Gate or arch, the northern entrance to the city in the upper town. It is one of the finest examples of early Roman masonry existing. As at Peterborough and other Roman settlements, the great roads passed through cemeteries connected with the ancient city. Excavations have disclosed many interesting and valuable relics. Tombstones and other sepulchral memorials are numerous, both in our National Collection and in the city itself; sculptures and inscribed tablets are recorded and preserved, viz., one to Volusia Faustina and Claudia Catiola; another to Titus Valerius Pudens, son of Titus of the Second Legion; and a third to "Brusei filius civis Senoni." Of other sepulchral monuments, reference is due to one noticed with others in the Cathedral cloisters. The lower portion, together with the inscription, is unfortunately lost. It represents a lady, an inhabitant, doubtless, of Roman Lindum, interesting as illustrating the head-dress and other details of costume adopted by the ladies of Roman Britain. She is attired in double tunics, the upper open, and disclosing what might well represent a modern frill; the hair is dressed in fashion customary during the time of Severus in the second century. She also wears a necklace of jet beads. This interesting memorial is illustrated by Mr. Roach Smith in the fifth volume of his *Collectanea Antiqua.* Among other relics to which no actual locality as to discovery is given, is a fine specimen of an iron sword, with portion of an ornamented scabbard of bronze; a fictile vessel, on which in painted letters are inscribed the words DEO MERCVRIO; an inscribed altar, discovered when excavating in the lower town, the dedication being to the *Parcæ Deæ,* divinities worshipped like the cult of the *Deæ Matres* by the Greeks and Romans. The inscription is of interest: it records that the altar was erected by one Frontinus, Curator of the Terræ or public lands attached to the colony of Lindum; every such settlement had lands assigned to it, from which revenue was drawn; and it would be the duty of this officer to look after such land and manage the income.

There are evidences of the existence of a Mint at Lindum, that is, if the exergual letters which occur upon some of the coins, viz., L. C., are correctly interpreted as meaning *Lindum Colonia.* The inference is supported by the survival in one of the most important localities in the city of the name "Mint Wall." The coins chiefly noted are those of Carausius, A.D. 287-293; Allectus, A.D. 293-296, and the Constantine family. It is well known that Saxon coins were minted at Lincoln. (*Arch. Journ.*, xvii, 19; *Assoc. Journ.*, xl, 125;

Camden, ii, 281, pl. xi ; *Celt, Rom., and Sax.* ; *Coll. Ant.*, iii, 68, v, 147 ; *Hübner*, vii, 52 ; *Lincoln Gazette*, 15th March 1884 ; *Proc. Soc. Ant.*, s. ii, 199.)

A tesselated pavement with hypocaust beneath has been described and illustrated. It was found within the precincts of the city.

Of the military occupation of Lincoln but little is known. The recorded inscriptions illustrate but a slight connection with three of the legions stationed in Britain. They point, however, to the same period in the history of the occupation as those noted in Colchester, York, and elsewhere. The sepulchral memorial to the son of Titus of the Second Legion is of interest. It reminds us of that portion of the Roman army which remained in Britain longer than any other regiment. It enjoys the honour of having been commanded on its first arrival by Vespasian, afterwards Emperor engaged under Ostorius Scapula in the battle with Caractacus, but not in the great contest with Boadicea. Its commander killed himself in consequence of having missed the opportunity of distinction. Another memorial is recorded to the memory of a soldier of the 14th Legion. This regiment bore the brunt of the insurrection already referred to. Its headquarters were at Wroxeter. The Ninth Legion, likewise also nearly annihilated in this contest, has left evidences of its presence in the form of tombstones commemorating two of its number at Lincoln.

AMYTOFT, in Holbech, or Holbeach Parish, found in an enclosure : (a moated square), coins, spearhead, urns, with indications of early buildings. Camden, ii, 235.

ANCASTER (CAUSENNÆ), now a village only. Occupies the site of a Roman station, twelve miles south of Lindum. Leland writes of it : "It hath been a celebrated towne, but not waullid, as far as I could perceive, etc." Coins, hoards of, numbering two thousand and fifty ; latest of Aurelius' reign, the larger proportion of Victorinus, Claudius Gothicus, and the Tetrici, Stone inscribed to Constantius. Group of the Deæ Matres, illustrating the popularity of the worship of the Triad in Roman Britain. Mosaic pavements, etc. Camden, ii, 250 ; Harrison's *Descrip. Britain*, ii, 17 ; Horsley, 432 ; *Num. Chron.*, v, 157. *See* ROADS.

ASHBY PUERORUM, sepulchral chest of freestone, containing an urn of green glass, nearly full of cinerated bones ; and fragments of a small lachrymatory. *Arch.*, xii, 96, 98.

AUKBOROUGH, eleven miles from Barton. Identified by Stukeley with the Aquis of Ravennas. Castrum and vicinal road. Allen, *Hist.*, ii, 220 ; *Itin. Curios.*, 91.

BELTON, a modern house of the Brownlows, an Irish family. In the grounds, and near to the Roman way, four cinerary urns were found, together with a large brass coin of Trajan. Camden, ii, 360.

BOOTHAM, on the outskirts of Lincoln, pottery vase of white ware, inscription dedication to Mercury, pink ware sprinkled with mica, potter's name CAMARO, F. *Proc. Soc. Ant.*, S. ii, iii, 440.

BOULTHAM, near Lincoln. Bronze lamp in the form of a dragon, with sepulchral inscription to the memory of Sempronius Flavinius ; mortuary urns. *Arch. Journ. Lincoln Congress*, 1848, 29.

BOSTON, fort or garrison to defend the mouth of the Witham. Hammond Beck, near where the fort stood, crosses the road near to Bridge End, where it and the Car-dyke are not far asunder. The causeway points to the town, its formation illustrative of Roman work. Reynolds' *Com. on Antonine Itinerary*, 257 ; Thompson's *Hist. of Boston*, 1856, 17.

BOTTESFORD, Roman tiles used for the conveyance of water found in a croft, east of the churchyard, hypocaust, tiles, and head of a jug discovered in the Pan Field, a quarter of a mile to the west of the church. Samian ware in the Manor Garden.†

BROCKLESBY, eight miles from Caistor. Mortuary urns, cinerated bones and ashes, beads, combs, rings, and other personal ornaments. Allen, *Hist.*, ii, 230.

BROUGHTON or BARROW-TOWN, on the great road from Lincoln to the Humber. A military station, and in the reign of Arcadius and Honorius, about the year 400, a prefect of the Dalmatian horse was stationed here, bricks, coins, tiles, and other relics. Allen, *Hist.*, ii, 216.

BURGH, remains of a Roman castrum, constructed for the protection of the sea-coast. Coins found in St. Mary's Churchyard (now demolished). Allen, *Hist.*, ii, 129.

CAISTOR, military station, walls. Allen, *Hist.*, ii, 225.

CAR-DYKE, canal or drain, one of the greatest engineering works in the county, extends from the river Welland to the river Witham, its length about forty miles, upon each side a broad flat bank. Its formation led to the recovery of a vast tract of land known as the Lincolnshire level, banks were constructed for the protection of the lowlands from the inroads of the sea. Catus Decianus, the procurator in the reign of Nero, believed to have been the official who executed or superintended the extensive drainage operations for the protection of the fens. Salmon, in *The Survey of England*, says that *Cardyke* signifies no more than *Fendyke*, the fens of Ankholme Level are still called Cars. Allen, *Hist.*, i, 8 ; Carte, *History of England*, i, 115, 119, 122. *See* ROADS.

CLEE, in the liberty of Grimsby. Depository for the storage of chalk for exportation in Roman times ; to the north of the village and near to Grimsby ; artificial mounds possibly used as beacons. Allen, *Hist.*, ii, 244.

CROXTON, in its vicinity. Yarborough camp and entrenched position of Roman date, situate on the ridge of the downs ; coins in large numbers, among them some of the Emperor Licinius. Allen, *Hist.*, ii, 230.

DENTON, in the fields, near to the ancient seat of the Welby family, a mosaic pavement, 18 inches from the surface level, bricks, tile, and other *débris*, with foundations of buildings ; site near to Salters Road, probably a way utilised by the Romans for bringing salt from Holland, over Brigend Causey to Leicester and other inland towns. Allen, *Hist.*, ii, 315 ; Camden, ii, 251.

DONINGTON, in a field known by the name of Ringlands. Fragments of cinerary urns, human and other bones. Allen, *Hist.*, ii, 88.

EDLINGTON, in draining a field in the year 1819 heaps of animal bones were

dug up; with each heap was included an urn of baked clay. Allen, *Hist.*, ii, 86.

FOSS-DYKE, a continuation of the Car-Dyke which skirted the fens from Peterborough to Lincoln, led from the latter to the Trent, to enable boats to pass on to the Humber (*see* ROADS); bronze figure representing Mars, with a plumed helmet, inscribed with a dedication by Bruccius and Caratius. Allen, *Hist.*, i, 6; *Arch.*, xiv, 273; Camden, ii, 280, pl. xi; Hübner, vii, 52.

GEDNEY, hill in the parish of Gedney. Coins of Antoninus and *débris* of buildings. Camden, ii, 234.

GAINSBOROUGH, adjoining Park House, two miles south-east of the town, are several encampments, the largest almost square, and measuring about two hundred and ninety feet on the outside; width of the fosse, twenty feet. Allen, *Hist.*, ii, 26.

GRANTHAM, on the Ermine Street. Coins of Claudius and Antoninus. Allen, *Hist.*, ii, 300; Camden, ii, 360.

HACEBY, tesselated pavement, seven miles east of Grantham, on the side of a hill by the Bridge End Turnpike; slates and figured tiles, with other traces of buildings. *G. M.*, 1818, i, 634.

HARLAXTON, near to Grantham. In the year 1740 an urn was found containing burnt bones, with coins of Gallienus and Claudius Gothicus. Allen, *Hist.*, ii, 315.

HIBALDSTON, four miles from Brigg, on the road to Barton. To the west of the village, foundations of Roman buildings, probably the site of the station "In Medio", being about an equal distance between Lincoln and the Humber. Allen, *Hist.*, ii, 217.

HOLYWELL HALL, bead of a reddish coloured agate, found in an aged tree; bronze armilla, steelyard or scale for weighing; pottery. *Arch. Journ.*, Lincoln Congress, 1848, p. 29.

HORKSTOW, near to the High Street, or Old Street, leading from Lincoln to the Humber. Mosaic pavements exceptionally fine; walls, frescoes, and the usual *débris* attached to an extensive range of buildings; pottery, etc. Lysons, *Reliq. Britann. Romanæ* (coloured plates and sections).

HORNCASTLE, military station, presumed to be the "Banovallum" of the geographer Ravennas. Traces of a massive enclosing wall nearly 600 feet long by 350 feet broad on the east and 300 on the west. Without the walls, the fields abound with sepulchral remains, cinerary urns with coins both of the Higher and Lower Empire. Allen, *Hist.*, ii, 90-91. Weir's *Horncastle*, 5.

HUNNINGTON, near Ancaster. Roman Camp, entrenched entrance on the east side; coins in urns; horse furniture with weapons. Camden, ii, 250.

KESTEVEN; one of the three divisions into which the county is divided. In the vicinity Camden places Margidunum (probably Bridgeford) next station after Verometum (near Willoughby) to Ad Pontem, probably identified with the modern village of Farndon. In Deping Fen, fibula, gilt and enamelled swords, etc. Camden, ii, 227-43; *Celt, Roman, and Saxon*, p. 127.

LINCOLN (Lindum Colonia), *see* Introduction. Quaintly described by Bray in his Diary of Evelyn, i, 30, as being an old confused town, very long, uneven, steep, and ragged.

——— CASTLE, gateway or sally-port walled up in the western wall; considered to have been the west wall of the Roman Castrum, mound of earth

removed ; the gate of tower exposed, buried by earth by order of William the Conqueror, when the castle was erected ; accidentally uncovered in the year 1836. It was in a ruinous condition, and fell down within a few days after its discovery. Previous to this a drawing had been made ; the great arch resembled that of Newport Gate, but had no posterns ; coins, pavements, and pottery. *Assoc. Journ.*, xxxv, 310 ; *G. M.*, 1786, ii, 540 ; 1836, 18 ; 1842, 351.

LINCOLN CATHEDRAL, about a mile to the east of the building, and in some stone quarries, coins of Hadrian have been found, also cinerated bones in urns. Camden, ii, 4.

——— BAILGATE, coins of Nero, Lucius Verus, Constantine, etc., columns and other architectural fragments, sculptures and inscribed stones, excavations near the Mint wall in 1878 ; discovery of four columns standing on two fronts north and east upon a stone floor a little above the level of the ancient road ; around them many relics, such as glass and pottery, a bronze key, and fragments of iron work ; inscribed milliarium found at the junction of the four great ways, it recorded the name of Victorinus the Pious, one of the "thirty tyrants" who rebelled in the reigns of Gallienus and Valerian, and the inscription concludes with the information that from Lindum to Segelocum is fourteen miles. *Assoc. Journ.*, xxxv, 315, 316 ; *Proc. Soc. Ant.*, ii, vii, s. 433, 436.

——— EASTGATE, in a quarry in the east field near to the eastern entrance to the city, sepulchres, chest or sarcophagus of stone, contained ashes, sand, and charred bones from the same cemetery; a glass urn, also decorated pottery; traces of interments by inhumation ; later excavations on the same site, a perfect male skeleton, at his right arm an urn full of earth and bones, upon his left a jar of glittering glass, containing a metal spoon ; a mortuary urn was likewise placed at the feet, near to the large glass bottle ; pieces of black and yellow pitch. *Arch.*, x, 345 ; xii, 108, 113.

——— SOUTHGATE, opposite to Newport Arch, and of similar construction, ninety feet north of the Bailgate. Destroyed in the early part of the last century, but with great difficulty, owing to the solidity and strength of the masonry, and the ingenious manner in which the several stones had been fitted together, each block forming, as it were, a keystone to the arch.

——— HIGH STREET, roundel or tessera of bone, ornamented with small impressed circles, associated with other remains of the Roman age. *Arch. Journ.*, Lincoln Meeting Arch. Inst., 1848, 28.

——— ST. MARY'S CHURCH, monumental stone, sepulchral and inscribed (in the church wall), found in the year 1724, in a field behind the house where Lord Hussey was beheaded for rebellion in the reign of Henry VIII, opposite to John of Gaunt's house. *Arch. Journ.*, xvii, 15 ; Camden, ii, 374 ; Horsley, 319 ; Hübner, vii, 53 ; *Itin. Curios.*, i, 86, 91.

——— Mechanics' Institution, in the museum, a cast of inscribed tablet found opposite the City gaol, to the memory of Crisis, who lived ninety years in the house of one Claudia ; also a second cast from another inscription, preserved in the cloister of the cathedral, to the memory of Flavius Helius ; bronze lamp in the form of a dragon, sepulchral inscription to the memory of Sempronius Flavinius. *Arch. Journ.*, xvii, 8 ; *G. M.*, xii, 1840, 79 ; Hübner, vii, 53 ; *Arch. Journ.*, Lincoln Congress, 1848, 29.

——— MONSON STREET, inscribed "cippus", character of letters suggestive of Vespasian's reign, tablet with inscription. *Arch. Journ.*, xvii, 18 ; Hübner, vii, 52 ; *Arch. Journ.*, Lincoln, 1848, 28.

LINCOLN, NEWPORT ARCH or PORTWAY GATE, not the decuman or principal gate of the city, but a subordinate entrance. Stukeley writes of it "as being the noblest remnant of the sort in Britain." The arch consisted of a lofty centre and two sideways, the larger for carriages, the other for pedestrians ; it is built of stones, and without a key, has defied the effects of time, and still justifies the opinion expressed by the historian. Armlets, jet ornaments, necklets, pins, etc., on the breast of a skeleton, votive tablet found in the wall. *Arch. Journ.*, xvii, 4 ; *Brit. Mus.* ; Camden, ii, 392 (pl. xii, fig. 3) ; *Assoc. Journ.*, xxxv, 310 ; *G. M.* xiii, 79 ; Hübner, vii, 53.

——— SALT HOUSE LANE, portion of the cemetery belonging to Roman Lincoln, inscribed stone of altar-like form, triangular features on either side, has reference to a soldier of the ninth legion. *G. M.*, 1866, i, 816 ; Hübner, vii, 52 ; *Reliquary*, vii, 16.

——— THE SALT WAY, entered the county not far from Saltby, crossed the Witham at Saltersford, near to the town of Ponton. *Hist. of Boston*, 13.

——— WALL, around the brow of Steep Hill, a natural escarpment, was reared the massive wall for the enclosure of the city ; it was pierced by four gates, and enclosed an area of five hundred by four hundred yards. In method of construction the Roman masonry resembles that already described at Colchester, London, York, and other places.

ROADS, radiating to and from Lindum. Of the great highways in Britain, only three have any connection with Lincolnshire, viz., Ermine Street, the Foss, and the Saltway. The Ermine Street entered the county a little to the west of Stamford, thence by Castor (Durobrivæ) to the ninety-sixth milestone on the great north road, thence to the east of Navensby, Boothby, and Bracebridge, on to Lincoln. The course was then due north, through Spittal, Broughton, and Appleby, to Winterton (Ad Abum), a station on the banks of the Humber. A second branch turned off, after crossing the river Nene in Northamptonshire, on to Lotham Bridge, Kates Bridge, Thirlby Bourn, Cawthorpe, Hanthorp, Stanefield, Aslackby, to the east of Folkingham and Freckingham, then in a direct line on to Old Place, near Sleaford, across the river and a little to the left of Ruskington, Donington, Digby, Rowston, Blankney, Metheringham, Dunstan, Nocton, Potterhamworth, and Branston, on to Lincoln. Both roads entered the city at a place known as the Stanbord or Stonebord, where they parted, the first leading up to the Portway or Newport Gate, the other running by the eastern side of the ancient city on to Leicestershire *via* Saltley. Roman roads have also been identified at Ravensbank or Romansbank, Pinchbeck, Bicker, Wainfleet, Burgh, Somercoates, Scarth, Grimsby, Stallingborough, Harburgh, Thornton, Barrow, Barton, Wintringham, and Alkborough. A road (name unknown) from Doncaster to the north of Lincoln, thence *via* Horncastle and Little Steeping to Wainfleet. *Itin. Curiosum* ; *Assoc. Journ.*, xxxv, 354.

LUDFORD, on the road between Louth and Market Rasen. Coins and other relics. Allen, *Hist.*, ii, 69.

MARTON, a village on a Roman way, known as Tillbridge Lane, leading from the Ermine Street to the river Trent. Allen, *Hist.*, ii, 47.

MISSINGHAM, coins, third brass.†

NERTHORPE, sculpture, but in a fragmentary condition. Coins, gold aureus of Maximian, A.D. 292-311, a fine specimen found in drainage works some thirty years since.†

NEW ROAD, portion of an ancient conduit for the supply of water to Lindum. Camden, ii, 366.

NORTH KYME, near to Sleaford. Encampment on the line of road running through the parish of Ewerby on to Horncastle. Allen, *Hist.*, ii, 276.

SOUTH ORMESBY, encampment covering nearly three acres of land within the area. Artificial mounds. Coins chiefly of Constantine have been found, both within and near it. Allen, *Hist.*, ii, 177 ; *Beauties of England and Wales*, ix, 714.

PONTON, near to the river Witham. Coins, pavements, and formerly an ancient bridge, situate on the great military highway, and said by Camden to be identified with the station Ad Pontem (?) by Horsley at Southwen. Coins : one of Trajan in silver ; bricks, mosaic pavements, and urns. The fosseway, paved with blue flagstones laid on edge, runs by this place from Newark to Leicester. Allen, *Hist.*, ii, 316 ; Camden, ii, 227-250.

ROXBY, tesselated pavements. Abraham de la Prynne's *Diary*, Surtees Society, liv, 212 ; Camden, ii, 388 ; *Vetusta Monumenta*, ii, pl. ix ; *Proc. Soc. Ant.*, s. ii, vi, 114, 115.

SANTON, a hamlet, so named from the flying sands there. Traces of a Roman pottery, remains of furnaces, coins, fragments of urns, etc. Allen, *Hist.*, ii, 220.

SAXBY, ten miles from Lincoln. Remains of Roman villa near to the parish church. Allen, *Hist.*, ii, 35.

SAXELBY, at the side of the river Witham. Sepulchral tablet with inscription. *Arch. Journ.*, Lincoln Congress, 1848, p. 28.

SCAMPTON, a village situated about a mile distant from the Ermine Street, which forms the eastern boundary of the parish. Roman villa discovered in the year 1795, enclosed an area of 200 square feet, upwards of forty rooms or chambers, tesselated pavements and painted walls. Of thirteen floors one only entire (this destroyed by the severity of the weather in the winter of 1815-16). Engraving of it published in Illingworth's *Topog. Account of Scampton*. In two of the rooms were human skeletons. Allen, *Hist.*, ii, 58.

SCOPWITH. Coin, large brass of Trajan. *Proc. Soc. Ant.*, Ser. II, vi, 75.

SEMPERINGHAM. Beads and other personal ornaments, urn or vase of light red ware ; figure of Victory with hare behind her. Camden, ii, 246.

SLEAFORD, town built of stone. Coins of Nero, Commodus, and Constantius. Castle built upon Roman *débris*, situate in Old Sleaford or Quarington parish (*see* ROADS). Camden, ii, 247.

SPALDING. Coins found in the year 1745, an urn near to the bank of the river Lenda, another of red ware, twelve inches in diameter, beneath the roots of an ash-tree. Camden, ii, 238 ; *Phil. Trans.*, 279, 1156.

SPITTAL IN THE STREET, a hamlet in the parish of Hemswell, thus named from an ancient hospital and its situation on the Roman way running from Lincoln to the Humber. Allen, *Hist.*, ii, 37.

STAMFORD, near to the High Street. Roman pavement of rude material; stones and other *débris*. *G. M.*, 1839, ii, 527.

STURTON IN THE STREET, anciently known as Stretton or Street-town, from its situation on the way branching from the Ermine Street to Agelocum or Littleborough Ferry. Allen, *Hist.*, ii, 47.

SUMMER CASTLE, in the parish of Fillingham. In the grounds adjoining the castle indications of a Roman camp, coins, spears, swords, and bridle ornaments ; stone coffin containing human bones, cased in searcloth and

lead, with the vacancies filled up with liquid lime and alabaster. Allen, *Hist.*, ii, 39.

TATTERSHALL or TATESHALL, a summer military station, encampments in Tattershall Park. Coins found in different parts of the parish. Allen, *Hist.*, ii, 72.

TETFORD, encampments in the parish of South Ormsby. *Arch. Journ.*, Lincoln Congress, 182.

TORKSEY, Roman town, built near the river. Camden, iii, 361.

WAINFLEET, ALL SAINTS', affirmed by Stukeley to mark the site of the station *Venonæ*, mentioned by Ravennas; an ancient landing place or haven, near to a place called Northolm. Allen, *Hist.*, ii, 116; *Itin. Curios.*, i, 28-9.

WASHINGBOROUGH, near the river Witham. Examples of the British *cleddyr*, or leaf-shaped sword of bronze, associated with mortuary vessels of grey-coloured ware, belonging to the Anglo-Roman age. *Assoc. Journ.*, xi, 263.

WALESBY, coins of Gordian, Constantine, and Constantius and Constans; chisel, hand mills, Samian pottery, spindle whorls, cinerary urns, walls of buildings, etc. The site commands a view of the city, and within a few minutes' walk of the Humber and the sea. *G. M.*, 1861, i, 683.

WESTLODE, THE, one of the most ancient drains in Holland, constructed by the Romans when they raised the stupendous banks in the marshes against the sea, in order to carry off the upland waters, by its communication with the Welland at Spalding. *See* ROADS. Allen, *Hist.*, i, 7.

WELBOURN, in the valley stretching from Grantham to Lincoln, near to the Ermine Street or High Dyke, thither from Londinium to Lindum; adjoining the Rectory grounds are earthworks, those to the north being Roman, the others of later date. In addition to early British remains, Roman coins have been found belonging to the reigns of Gallienus, Tetricus, and Valens. *Assoc. Journ.*, xxxv, 278.

WINTERTON, indications of potteries, remnants of kilns, containing ashes, plaster, and pottery; tesselated pavements, one thirty feet long and nineteen broad: subject, Orpheus playing on the lyre, surrounded by animals. Allen, *Hist.*, ii, 223; *Proc. Soc. Ant.*, s. II, iv, 190; *Reliquary*, ix, 145.

WINTERINGHAM, a straggling place, washed at its base by the Humber. Chimney stones, pavements, and traces of streets constructed of sand and gravel. Allen, *Hist.*, ii, 222.

WORLABY, between Louth and Horncastle. Coins of the Antonines and Tetricus Senior; glass pottery, flanged roofing tiles, building materials, and minor objects. *Proc. Soc. Ant.*, s. II, viii, 368.

JOHN E. PRICE, F.S.A.

NOTE.—For a reference to the localities marked with an obelus † I am indebted to Edward Peacock, Esq., F.S.A., of Bottesford Manor, Brigg. They are not mentioned in the early county histories, the discoveries being of a comparatively recent date.

NOTES FROM PARLIAMENTARY PAPERS.

No. 7.—Notes of Two Journeys into Siam.

I.—The Laos State of Nān, Siam.

THE town Muang Nān is situated about a quarter of a mile from the right bank of the river, is inclosed by four walls of unequal length, in good repair, and from 12 ft. to 14 ft. high, and has one or two gates on each side. The houses are for the most part neat and clean-looking, and good paths intersect the town in all directions. The palace, if such it can be called, of the chief, is in the centre. It differs little from the houses of his sons, with the exception, perhaps, of being somewhat larger.

The most striking part of it is a small building of brick, with figures of fabulous animals before it, which we found was the library in which books and documents were kept.

On an empty space in front of the palace stands the Ṣanām, or court-house.

We found that a son of the chief had died some months before, just after his return from a visit to Bangkok, and that his cremation was now going on.

The principal Chaos, the Uparāt, Rachawong, Suriya, Mahapom, and Borom, are all sons of the chief. The Rachawong was away with the Siamese troops engaged in subduing the Haws near Luang Phrabang. All the others we saw during our stay.

We were lodged in a good "salā", the best of a group of six or seven of these resting-places situated outside the walls.

At the north-east corner of the wall there is a row of small bamboo sheds on each side of the road leading northward, in which native cloths and European goods are sold by Shans and others. These are the only shops at Nān. There were only about ten Chinese resident in or near the town, and they appeared to have but little trade in their hands.

About two miles distant on the road alluded to above is the "old town", consisting of a considerable number of houses, some of them of large size. It was formerly surrounded by a substantial palisade, some portions of which still remain, and good teak posts were lying scattered about in all directions. It appears that Nān was first

built on its present site, afterwards the people removed to the "old city", and then the present town was built.

The "thalāt", or market, is held every morning near the Palace, but there is little exposed for sale except native provisions. These are spread on banana leaves on the ground in front of a row of women on each side of the road. A similar market, but smaller, is held in the "old city".

Outside the town and behind the "salās" is a Tongsu settlement.

The most important "wat" in the town is Wat Poomintarachā, a square building, with a fine quadruple figure of Buddha in the centre. Here we found an old priest who had been to England some three or four years ago with some Burmese who went to sell precious stones, and was still full of his adventures.

The members of the Sanām have to attend every day for about four hours in the afternoon.

One of their number gave us information concerning the laws and customs of Nān.

For stealing an elephant, killing an elephant, a buffalo, or a bullock, the punishment is death. Murder and housebreaking are also punished with death. A person detected in smoking opium is imprisoned for three years, and for a second offence he would probably be put to death.

This system appears to work well, there having been no execution during the year then current, and only one the year before, while there were only four or five prisoners at the time of our visit.

The members of the Sanām receive no pay; but while we were at Nān a quantity of salt was brought in as tribute from some mines or springs about four days' journey from the town, and each of the members of the Sanām received a portion of this as well as the chief. It is also customary when an elephant is sold for the buyer to pay 16 rupees, and the seller 4 rupees, as fees to the Sanām.

With regard to slaves, every man of the lower orders must be enrolled at the Sanām as the slave of some master, but he is allowed to choose whom he will serve, and if he does not like one he may re-enrol himself as the slave of another, his own name being then changed. A slave is fed by his master while he is working for him, but at other times he must feed himself. No purchase-money is paid for him by his owner.

No one is allowed to catch the wild elephants, which are to be found within a few days' journey of the town, except those who are

appointed by the chief, and if a captive elephant dies the tusks must be sold to the chief at a fixed rate.

During the first three days of our stay we went daily to see the cremation ceremonies, which took place in the open space in front of the palace, the chief and his sons looking on from bamboo sheds erected for the purpose.

The first day we saw some boxing by young Laos, which the people seemed never tired of watching. Some novel features to Europeans were the postures and grimaces which seemed to be considered an essential part of the fighting, and the use of the feet, in which some of the combatants were rather dexterous, occasionally dealing their antagonists a smart blow in the face with them.

On the second day, in addition to the boxing, a game was played which bore some resemblance to football. A large cocoa-nut well greased was thrown amongst a number of young men, who then struggled to get possession of it, and the one who managed to get away with it to the other end of the ground received a prize.

After the ceremony of throwing limes containing two-anna pieces amongst the crowd had taken place, the "prasāt", or wooden structure containing the urn, was borne aloft on the shoulders of about ninety men, and carried out to a place on the bank of the river, about a quarter of a mile from the walls, followed by a long procession, in which were the sons of the chief with their attendants. In accordance with the barbarous custom prevalent here, the "prasāt" was opened and the body taken out and stripped of all its coverings before the pyre was lighted by the Uparāt.

II.—The Vice-Consular District of Chiengmai, Siam.

Chiengdāo and Müang Ngāi.—On this plain, separated only by a few miles of forest, are situated Chiengdāo and Müang Ngāi, both mere villages surrounded by the wooden palisade usually erected, I believe, to denote the seat of government of the province rather than for purposes of defence.

Frontier Settlements.—It is a curious fact that the families of the unfortunate people who are accused of being "phi ka", or evil spirits, are usually banished from Chiengmai to Chiengdāo; this is, perhaps, among the first signs of the policy of encouraging settlements on the frontier districts which has since undergone such great development. Müang Ngāi is evidently of later foundation, and the Lao settlements scarcely extend further north. But settlers, mostly Ngios, have recently occupied Müang Pāi to the west and Müang Na to the north-west.

Müang Ngai to Müang Fāng.—The route from Müang Ngā to Müang Fāng crosses the chain of mountains which divides the basin of the Nam Khōng[1] from that of the Më Ping. Passing through rich teak forests the path rises gradually, with only an occasionally steep ascent, until, towards the close of a long day's journey by elephant, the highest pass is reached, at an altitude of about 2,750 feet. After a steep declivity the valley opens out into an extensive plateau, and on the face of a hill jutting out on it is the "Tham-Tab-tao", a cave of great fame to which pilgrimages are made from all parts of the country. It contains an altar where, as usual, offerings are made to numerous images of Buddha; for the Buddhists of this country hardly ever omit to erect a shrine at any spot where a natural marvel strikes the imagination with awe or wonder. The cave is large and probably of great depth, but, outside of its religious character, it has little attraction for a traveller, and the path leading to it is so rough that it hardly deserves a visit.

Müang Fāng.—The Province of Müang Fāng consists of the valley of the Më Fāng, which is of considerable length, but narrow.

The seat of government of the settlement is a large village occupying the site of the old capital; the old ditch or embankment is still visible, and the ruins of numerous temples testify to the former importance of the city. It is said to have been destroyed about 170 years ago by the Burmese. I think, however, that the place was not entirely deserted till after the middle of the last century. That the valley of the Më Fāng formerly contained a large population is proved by the most reliable evidence—the number of temples in ruins strewn close to both banks down to the junction with the Më Khok; and that the country was well cultivated is shown by the present stunted vegetation. But the land close to the river is said to be at present so subject to high floods that no cultivation is possible; this curious fact may be due to some impediment of recent formation in the lower course of the river. There is, however, still a large extent of country well suitable to cultivation, and labour alone is required to bring the province to its former state of prosperity. I was informed that 320 ruined temples have been counted within the province, and this number probably does not include all; innumerable figures of Buddha strewn about these ruins are left undisturbed. I may, by the way, mention as an instance of the wrong impression made on an important people by unscrupulous travellers,

[1] More commonly known as the Me Kong or Cambodia River.

that I was told by some of the earlier settlers and by officials of the province, that "a former British Consul had purloined a number of Buddhas from the temples". This remark referred to a European traveller who some years ago attempted to take away some of these images.

Colonies of Aliens in Siam.—This is characteristic of all the settlements in Siam, both in the larger cities and in the provinces. In Bangkok the inhabitants of the different quarters have gradually become amalgamated, but not far from the capital the colonies of former captives of war still retain their language and customs, and keep up little intercourse with their conquerors. In the northern country the separation is as complete, and the town of Chiengmai, for instance, is divided into numerous quarters, inhabited almost exclusively by people of a different race; and many of the villages in the province are also colonies of refugees or captives.

"*Thai*" *Race.*—In my opinion, the country of the Thai Yai (literally "great Siamese"), or its vicinity, is the cradle of the Thai people, who have thence gradually flowed southward. The Thai family has numerous divisions, differing more or less in appearance, language, and costume, though it is not difficult to trace the common type through all. As a broad distinction I think it may be said that the type has been modified by mixture with the neighbouring races. Thus, the Shans bordering on China must show traces of Chinese blood, and those on the west of the Salween of their long intercourse with the Burmese; while, on the south, intermixture with the Peguan, Malay, Cambodian, and Annamite races has, to all appearances, produced the present Siamese type. The whole subject of the gradual development and modifications of the Thai race is a very interesting one from an ethnological point of view, and, in the absence of any records, I think is well worthy of research for the light it may throw on the early history of Indo-China.

Laos.—It is curious how the name of "Thai", or "free", is claimed by different branches of the family. It is only the Siamese that give the name of Lao to the people of these States, and, for some reason, the latter do not consider it at all complimentary, and apply it only to the white-bellied people of the basin of the Nam Khōng, beyond Müang Nan. These are, I believe, sometimes called "Lao Yuen" by the Siamese; it is also curious that the Upper Shans designate the Laos as "Yuen", the Siamese name for the Annamites.

Shans.—The Shans of the basin of the Salween call themselves, and are called by the Laos, "Ngios". I need hardly state that the name of "Shan" is given to the Thai people by the Burmese alone; but, while usage may render it convenient to retain it as the designation of all the people of the States formerly tributary to Burmah, it is, I think, more convenient to adopt the Siamese name of Lao for the people of the northern and eastern States tributary to Siam.

Më Khok.—After crossing the Më Fāng the road passes through some new settlements, and then through a broad belt of bamboo forest extending as far as the Më Khok. This river, the most important tributary of the Nam Khōng from the five Lao States, drains a considerable extent of country, and is here, at least as broad and deep as the Më Ping at Chiengmai. On the south side is a small Lao village, but on the north bank is a settlement of Ngios, subject to Chiengtung; and there was here a striking difference in the appearance of the people, as well as in their rude houses, with the low roof sloping down to within a few feet from the ground. The village of Wieng Kë is small, but on the day of my arrival a considerable addition to its population was made by a number of settlers from Müang Tuen. Wieng Kë is said to be on the site of a former town of the same name, which was probably a place of some importance; a deep ditch still shows the limits of the old town. Not far distant, and close to the mouth of the Më Fāng, are the ruins of an old temple called "That sob Fāng", to which pilgrimages are still frequently made.

From Wieng Kë a path leads northwards to Chiengtung, across mountains inhabited by Kuis and Musös. The former are a hill tribe inhabiting the mountains of Chiengtung, but the latter are scattered further south in the mountainous tract lying between Müang Fāng and Chiengsën, and occupy also the hills directly to the north of these provinces.

The Musös.—The Musös are probably, like the other hill tribes, the aboriginal people of Indo-China. In appearance they are unlike either Laos or Shans, though it is not easy to point out any marked difference in physiognomy. The language of the Musös appears to have no affinity with that of the Thai family; they have no written character, and are not Buddhists; but, as far as I could comprehend, appear to have no religious ideas beyond a vague dread of spirits. Their habits are extremely dirty, and it is probably due to this and to their low style of living that their physique is generally so poor. Like all the people of Indo-China,

their staple food is rice ; but, unlike the Laos, they do not raise it on low land or valleys.

Cultivation by Hill Tribes.—Their system of cultivation is one that is very largely practised in Indo-China, and I believe in some parts of India, where it is styled "joorning". It is adopted to some extent by the Laos themselves, but, on a small scale, and not usually on a mountainous country. The side of a hill is chosen where the declivity is not too steep or the surface too uneven ; the forest is then cleared during the cold season and all the trees felled. When, in the hot months, the timber has become sufficiently dry fire is set to it, and the ashes so fertilise the soil, that it produces almost invariably a rich crop : fresh soil must, however, be prepared next year, for after the first year this manure has lost most of its virtue, or has been mostly washed away. This constant opening up of fresh soil necessarily renders these people nomadic. Having chosen the spot for the next year's work, a few families construct some small, mean huts, the floor being sometimes on the level of the ground or sometimes raised a few feet from it, and here they remain only until the crop has been gathered. The rice is small and of a reddish colour, but tasty ; and the cotton, which is almost invariably cultivated, is of good quality. Besides this, they raise chillies and tobacco.

Hill Tribes, or Khas.—It would be interesting to ascertain whether there is any affinity between the various hill-tribes scattered over the mountains of at least this part of Indo-China, such as in Chiengtung, the Musös, Kuis, and Kaws. The latter are said to murder mercilessly any stranger that ventures into their country ; but this common account of the Kaws probably has no better foundation than the exaggerated dread of the Thai race of the hill-tribes, who, they declare, practise magic arts on all outsiders. The Lawas are partly in Chiengtung, and partly in Chiengmai, where they are commonly spoken of as the aborigines of this country. To the east of the Nam Khōng are the Khamus, Lamets, and other numerous tribes of Khas. The Khamus now emigrate in large numbers to these provinces, and supply the best labour to foresters ; they appear to be of better physique and of superior intelligence to the Musös. They are a very numerous tribe, the greater part of whom occupy the mountains of Luang Phrabang, but some are in the Province of Nan. This State appears to have acquired suzerainty also over the Lamets, who occupy the mountainous region on the left bank of the Nam Khōng, extending to the north of Chieng Khōng beyond the parallel of Chiengtung.

The Lamets differ from the Khamus in language, but not much in appearance. They are easily distinguished from them, however, by the manner of tying their hair in a knot lower back on the head than the Khamus. Also, instead of the coarse blue cotton trousers and jackets of the Khamus, the only article of apparel of the Lamets is a narrow piece of cloth tied round the waist and between the legs. They are said to be also a very considerable tribe, able to bring a force of 3,000 or 4,000 men on the field. Following the example of the Khamus, some of these people now come to seek labour as far as the forests of Chiengmai, and, like them, they lay out their hard-earned wages in the purchase of gongs, which appear to constitute the sole attributive of wealth in their native villages. I cannot vouch for the correctness of the information given me regarding the Lamets, but it is very probable that the style of living and the system of cultivation of any of these hill-tribes applies equally well to all.

Siamese Frontier Fort.—The fort is some ten miles to the north of this cave ; it is a small stockade on the south bank of the Më Sai, and around it are a few houses inhabited by Lao settlers. On the hills not far from the foot are some Musö villages, which I took the opportunity of visiting ; and close to it, but on the north bank of the Më Sai, are some prosperous villages of Chiengtung subjects.

These people are not Khöns, as many of the people of Chiengtung, but Ngios, and probably settlers from the country close to the Salween. They are easily distinguished from the Laos, with whom they have many points of dissimilarity in manner, dress, and language, but to describe them would be to describe the Upper Shans. From such observations as I have had the opportunity of making, I have concluded that the Laos of these States bear closer resemblance in every respect to the Khöns, the dominant race of Chiengtung, than to any other branch of the Thai family.

Settlement of Müang Phān.—The history of this small province is interesting, as showing in what manner colonies are effected, and how confusing are the boundaries of the different states. The country was evidently deserted during the early part of this century ; later, a part of it was occupied by people from Lakhon, who, however, afterwards withdrew further south. About fifty years ago a settlement was made by people from Lamphun, who have since gradually brought the country to its present prosperous condition. Müang Phān is, therefore, governed by the state of Lamphun, though not adjacent to it ; but both Lakhon on the south and

Chienghai on the north lay claim to at least a portion of the little province.

Formation of Colonies.—Whilst at Müang Phān, I witnessed another phase in the formation of settlements in this country, The chief of Chiengsën having received permission to establish in his province a number of the inhabitants of Müang Phān, proceeded, in the language of the country, to drive the people into the new colony. However sound may be this policy of migration, it was impossible not to commiserate the unfortunate people who were thus driven from a comfortable home into a bare, uncultivated country, where it would cost them many years of struggle to recover only a portion of their former prosperity. Unable to dispose at so short a notice of their houses, their gardens, and fertile rice-fields, they were compelled to abandon everything that could not be easily transported. I met many of these families, some carrying their children, or perhaps the domestic fowl, in their arms, and some such few household goods as they were able to remove.

Phayāo.—Phayāo lies to the south of this lake and has some importance, chiefly as the seat of this trade, and as a station on the important route from Chienghai to the southern Lao provinces. Close outside the walls is a temple remarkable for an immense image of Buddha ; tradition tells that a marsh was filled up on which the temple, and subsequently the town, were built.

Information from Natives.—No reliance, however, can be placed on information given by natives, whatever their position may be, for, beyond matters of daily requirement, they take no pains to ascertain any facts which are usually considered interesting and important by foreigners. For this reason I have excluded from this report a great deal of interesting, but not reliable, information.

Superstition.—I may mention as a curious instance of the superstitious character of the Laos, and, at the same time, of their good-will, that in Müang Suet I was waited upon by a deputation of the Headmen of the villages, who warned me of the danger to which I was exposing myself by encamping too close to a large tree. This was said to be the dwelling of the spirit of the province, which never fails to wreak vengeance on any intruder. Daily offerings are made to the spirit, and no one ventures close to the tree at night.

History of Müang Nan.—The natural difficulties of the route have been utilised in a most remarkable manner for the liberation of the country from the domination of the Burmese. The following narrative, given me on the authority of the Chief of Nan, throws

some light on a most interesting epoch of the history of the country, and is especially worthy of notice, as I believe no written record of the occurrences exists. In former times, when the country contained a far smaller population than at present, a Chief of Chiengmai sent two "phyas", or Headmen, to colonise Müang Nan. One of them, named Phya Tun, remained, and one of his descendants in the latter part of the last century was a young man named Noi Atha. About or after the time of the taking of the capital of Siam by the Burmese (A.D. 1767), the latter were in possession of Müang Nan, and Noi Atha served under them against the Siamese. He committed great slaughter, but was ultimately taken prisoner. He pleaded that he had been forced to take up arms against his will, and the King of Siam offered him his pardon on condition that he would faithfully serve the Siamese against Burmah. Noi Atha resolved to prove himself deserving of this act of clemency and to free his country from the Burmese yoke. Pretending that he had escaped from the Siamese, he repaired to Burmah, and induced the Burmese general, who never doubted his fidelity, to send a force to Nan. Müang Thöng, on the north-west, was first chosen as the head-quarters, and Noi Atha undertook to push forward and make preparations for the further progress of the army. Having concerted measures with his countrymen, he invited the Burmese to proceed to the capital. A force of 4,000 men started, but when they had entered the dangerous gorge of the Më Si-phan, the Laos, who were lying in wait for them, hurled rocks from the overhanging heights, and closing in on each side, exterminated the Burmese force. Thus the stream came to acquire its present name of Më Si-phan, "The River of the Four Thousand." Noi Atha was rewarded by the King of Siam with the high title of "Chao Fa Atha", or prince, and became the first of the Chiefs of Nan, who have since remained tributary to Siam. The successors of Chao Noi Atha were his relatives, but the present chief, the fourth of the line, is his son. He is, I believe, the oldest of the chiefs tributary to Siam, and it is remarkable that his sons are vested with all the high offices of the State.

Lao Customs and Laws.—It is here that many of the laws and customs of the country are still preserved which have fallen into disuse in the more western States, probably owing to more frequent intercourse with the Siamese, whose manners, language, and dress the Laos are always eager to imitate. Thus, the criminal code of Nan is of the old Draconic severity. The punishment for theft and robbery is death, and as it is often applied, the province enjoys a most

enviable immunity from crime, and its people a very wide reputation for honesty. Capital punishment is not so commonly applied in the more western States, and more often the less effective, but more profitable, punishment is adopted of seizing also the family of the criminal and reducing them all to slavery, as well as confiscating their property.

People.—The people of Nan are no doubt a far purer race than that of Chiengmai, and, it struck me, are handsomer, though of darker complexion. It would indeed be hardly correct to judge of the Lao race by the people of Chiengmai, for the constant intercourse with their neighbours, the Burmese and Shans, has, no doubt, greatly modified the original type. Some peculiarities of pronunciations are common to Nan, Phrë and Lakhon, but there is closer connection between the two former. Though the language is radically the same in Nan and Chiengmai, there is, however, considerable difference between the two provinces in tone and idiom.

Costume.—In dress it appears probable that Müang Nan has preserved the customs once common to all the Laos. With regard to the men, the usual clothing is so scanty that it hardly admits of any modification, but on formal occasions the Headmen wear a red turban and silk jacket. In Chiengmai the latter has been replaced by the white jacket copied by the Siamese from the Europeans. The "sins", or petticoats, of the women, however, are in Nan of a distinctly different and, I think, more tasteful pattern. They also wear thick silver bracelets not very different from those of the Ngios in Chiengsën, and their hair is tied in a knot, not so low back as in Chiengmai.

With regard to the peculiarities of costume and of the manner of dressing the hair, which distinguish the Lao women from the Siamese, and both Lao and Siamese men from the Shans, the following explanation given me may, if correct, draw closer the connection between the Siamese and the more northern branches of the Thai family. It is said that the "sin" of the Laos was formerly also worn by the Siamese women, but that, on the occasion of an invasion of Lower Siam by the Burmese, it was ordered, in order to facilitate their escape, that the Siamese women should wear clothes similar to those of the men ; and gradually this dress became established amongst them. It is, indeed, curious that the style of dress of the Siamese women should differ from that of all their neighbours, the Malays, Annamites, Laos, and Burmese. Again, it is said that the Siamese formerly wore their hair long and

tied up in a knot like the Shans, but that at the time of the wars between the Siamese and Burmese, or Peguans, in the sixteenth century, orders were given that the Siamese should cut their hair close, to distinguish them from their enemies.

City of Nan.—The walled city of Nan itself is smaller than Chiengmai, and bears much resemblance, both in shape and dimensions, to the little city of Lamphun. It contains almost exclusively the residences of the chiefs and a few temples, but the greater part of the inhabitants reside at Wieng Kāo, a large suburb about a mile to the north, occupying about half the area inclosed by a rectangular palisade that is now almost entirely decayed. This was the former capital, and was abandoned about thirty years ago, because the location was not found propitious. This superstition, evidently of Chinese origin, is no doubt the reason that capitals of Indo-China are so often removed. Any personal misfortunes or unsuccess induces the ruler to seek what is supposed to be a more favourable site ; for the same reason all the official residences in Lakhon have been removed from the north to the south bank. The capital of the province is said to have been formerly further south ; but some of the temples near the city appear to be ancient. The account given of the foundation of Wat Changkham, the principal temple in the city, is common also to other temples in the country. When the city was besieged by the Burmese, or by Hōs, a compact was made that whichever side should first raise a " phrachedi" or pagoda of a certain height should be considered the victors. The invaders began to build one of brick, which is unfinished to this day ; but the Laos, with the aid of an elephant, were soon able to raise a high mound of the required height of baskets of sand, on the top of which they fixed the umbrella, and the enemy, taking it for granted that they were the losers, retreated. The name, " Wat Changkham," denotes that the temple owed its foundation to the assistance of an elephant.

THE SCIENCE OF FOLK-LORE.

IT is now many months since I have thought that I could restate, in at once a simpler and more correct form, that Classification of Folk-lore which I ventured to submit to students in the second edition of *Greek Folk-songs*. It has been ignored by the Folk-lore Society. But I have now to thank Mr. Nutt for his kind reference to it in last month's number of the *Archæological Review;* and the courtesy of the Editor allows me to restate my Scheme in the better form suggested by further reflection. In the general psychological principles of my Classification I have some confidence ; and I do not, therefore, here propose to trouble the reader with remarks on that subject. But it is because of my conviction that a finally satisfactory application of these principles in a Classification of Folk-lore can be worked out only with the aid of scientific criticism and earnest co-operation, that I have now for long desired an opportunity of restating my amended Scheme. This Scheme, however, implies a certain conception of the character and aim of a Science of Folk-lore, and hence, of its place in a Classification of the Sciences. But on this point some brief prefatory remarks only will here be necessary, as I have the pleasure of finding my views very much in accordance with those expressed by Mr. Nutt, in the paper above referred to. With Mr. Nutt I also agree in thinking that, as he says, "the opposition of Evolutionism and [as he calls it, not very aptly, perhaps] Revelationism is the most important question which lies before every investigator into the origin and development of the psychical and social expressions of man's individuality." And on this question I propose, before concluding, to offer certain suggestions, with no unimportant bearing, as I venture to think, on the reconciliation of these presently opposed theories of "Evolutionism" and (to use Gruppe's term) "Adaptationism".

2. First, then, as to the character and aim of a Science of Folk-lore, and hence its place in a Classification of the Sciences. Mr. Nutt appears to accept my definitions of *Folk* and of *Folk-lore* as in accordance with what he says is, "as a rule, the assumption, both of the archæological and the ethnological folk-lorist, namely,

that the belief and fancy of the relatively uncultured European peasant are substantially of the same essence as those of the absolutely uncultured savage." Admitting this with certain reservations, "by the *Folk* I mean people unaffected by culture; people relatively unaffected by culture, like the uncultured classes of a civilised state; and people absolutely unaffected by culture, like savages unvisited as yet by missionaries." *Folk-lore*, therefore, I define as "the lore of the folk about their own folk-life in its various expressions, in customs, in sayings, and in poesies —and the lore, therefore, knowledge of which gives knowledge of folk-life." And accepting, as he apparently does, these definitions of *Folk* and of *Folk-lore*, I may perhaps assume that Mr. Nutt accepts also that definition of the *Science of Folk-lore* which is naturally drawn from these definitions of *folk* and of *folk-lore*, the definition of the Science, namely, as "systematised knowledge of the lore of the folk, capable of co-ordination with other systematised knowledges."[1]

3. And now as to this "co-ordination with other systematised knowledges", or, in other words, as to the place of the Science of Folk-lore in a Classification of the Sciences. Regarding folk-lore as consisting of materials for the Science of Social Progress, and particularly for the historical Science of Religions, I have characterised it as "a descriptive or classificatory Science—a Science, not of the causes, but merely of the description, and what that implies when it is of a scientific character, the arrangement of phenomena." In this view also I am glad to find myself in accordance with Mr. Nutt. Several times in the course of his article he draws a comparison between the study of Folk-lore and *descriptive* Geology. I can hardly, however, think it a happy suggestion that the Science of Folk-lore should be treated as "a branch of the Science of Archæology"; though this is certainly an immense advance on the suggestion that it should be treated as "a branch of the science of Anthropology". For surely if Anthropology is to have any definite scientific meaning at all it must be limited to mean the general science of man's Physical Evolution. As distinguished from such a science we must recognise that of man's Mental Development, and that of man's Social Progress. I submit that the science of Folk-lore should be treated as a descriptive branch of this last science, and thus as a branch of what is commonly, but barbarously, called Sociology—Kœnoniology, as I should like to call it—or, more correctly, of its de-

[1] *Greek Folk-songs, Supplement*, pp. 266-7.

scriptive correlate, Sociography (Kœnoniography). And for the science of Folk-lore, as a department of this general descriptive science, I have ventured to suggest the term Kœnonosography (*κοινός γνῶσις*).

4. But whether we term the general science, to which we refer the science of Folk-lore, Archæology, or Sociology, we are agreed that it is a descriptive, rather than a causal, science—a science, that is, of which the great aim is a scientific classification, rather than explanation, of the phenomena with which it deals. What, then, shall be our guiding principle in classifying Folk-lore—in classifying the knowledge we may gain of the various expressions of Folk-life in Customs, in Sayings, and in Poesies? Folk-customs, -sayings, and -poesies may interest an antiquary of the type of the earlier collectors by reason merely of their curiousness, but their interest for the man of science is certainly of a very different character. To be a scientific collector of fossils one must be much more than a fossil-collector: one must be a scientific student of Earth's history—a scientific geologist and biologist. And so, to be a scientific collector of folk-lore, one must be much more than a folk-lore collector, or folk-lorist: one must be a scientific student of Man's history—a scientific psychologist and sociologist. For such a folk-lorist the knowledge of folk-lore is not an end, but a means—a means to the discovery of the Laws of human Thought, and of the progress of human Thought. But if so, then, is it not clear that our guiding principle in classifying folk-lore—classifying the knowledge we may gain of the various *expressions* of folk-life—must be some previous classification of the *conceptions* of folk-life? Not because of their *form* does the biologist value, nor according to their *form* does he classify, his fossils. Nor because of their *form* does the sociologist value, nor according to their *form* does he classify, his folk-lore. A scientific classification, whether of fossils or of folk-lore, must be derived from the study of *constitution* and of *organology*—that is to say, from the study of interior *content*, rather than from the observation of external *form*. And in order, therefore, scientifically to classify the expressions of folk-life we must endeavour, first, scientifically to classify the conceptions of folk-life.

5. Now, without entering on a pyschological discussion, and confining myself to the chief purpose of this paper—a restatement in a simpler and more correct form, of my Classification of Folk-lore—I would submit that the Conceptions of Folk-life may be distin-

guished as Cosmical Ideas, Moral Notions, and Historical Memories. As derived from, and corresponding to, the three primary modes of human expression, Action, Speech, and Fiction—the Expressions of Folk-life may be distinguished as Customs, Sayings, and Poesies. Classifying these, not according to their form, but according to their content—that is to say, according as they chiefly illustrate Cosmical Ideas, or Moral Notions, or Historical Memories—*Customs* may be distinguished as Ceremonies, Usages, and Festivals—Cosmical Ideas being chiefly illustrated in *Ceremonies;* Moral Notions in *Usages;* and Historical Memories in *Festivals.* These terms are, no doubt, at present used far more loosely. But it is the very function of scientific nomenclature to give definite and precise meanings to loosely used terms. Classifying *Sayings* in the same way, we get three classes; the first, chiefly illustrative of Cosmical Ideas; the second, of Moral Notions; and the third, of Historical Memories. It was difficult to find good English words that might aptly denote these three classes respectively. But I have suggested the terms *Spells*, *Saws*, and *Reades*. And similarly classifying *Folk-poesies*, according to their dominant psychological content, I have distinguished *Lays and Legends*, *Songs and Stories*, *Ballads and Sagas*, as illustrative, the first, chiefly of Cosmical Ideas; the second, chiefly of Moral Notions; and the third, chiefly of Historical Memories.

6. But each of these sub-classes of Customs, of Sayings, and of Poesies, is so large that it must be again divided. In accordance with the general principle of classification, this can be done only as the result of an analysis of the conceptions, which are the chief psychological content of these sub-classes. *Ceremonies*, the first sub-class of Customs, *Spells*, the first sub-class of Sayings, and *Lays and Legends*, the first sub-class of Poesies, were defined as chiefly illustrative of Cosmical Ideas; and hence if we would further classify these expressions of folk-life, we must further analyse the conceptions which they distinctively illustrate. Now, Cosmical Ideas may be distinguished, first, as ideas of Nature; secondly, as ideas of what I shall term Supernals, that is to say, of beings possessed of powers *above* those of ordinary beings, whether Animals (totems and "grateful beasts", etc.), Men (giants, dwarfs, etc.), or Spirits (demons and deities, etc.); and thirdly, as ideas of After-life. We shall, therefore, sub-classify Ceremonies, according as they chiefly illustrate ideas of Nature, or of Supernals, or of After-life. And similarly, we shall sub-classify Spells, and likewise Lays and Legends.

7. *Usages*, the second sub-class of Customs; *Saws*, the second

sub-clsss of Sayings ; and *Songs and Stories*, the second sub-class of Poesies, were defined as chiefly illustrative of Moral Notions. And hence, in order to classify the great variety of Usages, of Saws, and of Songs and Stories, Moral Notions must be analysed. These are at once naturally distinguishable as notions of right and wrong in Sexual, in Domestic, and in Communal Relations. Hence, in that class of Folk-poesies more particularly distinguished as *Songs and Stories*, we distinguish Love-songs and -stories, Family-songs and -stories, and Commune-songs and -stories ; or, as in *Greek Folk-songs*, I have named them, Erotic, Domestic, and Humouristic Songs. And similarly we may distinguish Usages and Saws.

8. Finally, with respect to this second degree of the sub-classification of Customs, Sayings, and Poesies. *Festivals*, the third sub-class of Customs ; *Reades*, the third sub-class of Sayings ; and *Ballads and Sagas*, the third sub-class of Poesies, were defined as chiefly illustrative of Historical Memories. Hence, to sub-classify Festivals, Reades, and Ballads and Sagas, we must classify Historical Memories. Folk-memories may, I submit, be exhaustively classified as memories of Seasons, memories of Heroes, and memories of Rights. We shall, therefore, sub-classify *Festivals* according as they chiefly illustrate memories of Seasons, or of Heroes, or of Rights—Beating the Bounds, and the Marriage of the Adriatic, being familiar examples of the latter. And, similarly, we may sub-classify *Reades* as Sayings chiefly illustrative of Historical Memories ; and *Ballads and Sagas*, as Poesies thus definable. Ballads and Sagas commemorative of Heroes are certainly the largest sub-class of ballads and sagas. Such, for instance, are all the historical ballads of my collection of Greek Folk-songs ; and commemorative of Heroes rather than of Seasons or of Rights, are probably also the majority of Reades and of Festivals.

9. As the scientific fossil-collector has for his finds the pigeon-holes of the biologist, so, I submit, should the scientific folk-lore-collector have the pigeon-holes of the psychologist. And perhaps it will give clearness to the statements of the three foregoing paragraphs if I exhibit them in a tabular form, which may be taken to represent three rows of pigeon-holes—distinguishable as the Cosmical Idea Row, the Moral Notion Row, and the Historical Memory Row. We shall find that, for the classification of Customs, Sayings, and Poesies, we are thus provided with *twenty-seven* psychological compartments, not only clearly definable, but systematically related.

Conceptions of Folk-life.		Expressions of Folk-life.		
A. *Cosmical Ideas.*	I. *Customs.*	II. *Sayings.*	III. *Poesies.*	
	(I)	(I)	(I)	
(*a*) Ideas of Nature	Ceremonies	1—	1— Lays	1—
(*b*) „ Supernals		2— Spells	2— and	2—
(*c*) „ After-life		3—	3— Legends	3—
B. *Moral Notions.*	(II)	(II)	(II)	
(*a*) Sexual	Usages	1—	1— Songs	1—
(*b*) Domestic		2— Saws	2— and	2—
(*c*) Communal		3—	3— Stories	3—
C. *Historical Memories.*	(III)	(III)	(III)	
(*a*) Memories of Seasons	Festivals	1—	1— Ballads	1—
(*b*) „ Heroes		2— Reades	2— and	2—
(*c*) „ Rights		3—	3— Sagas	3—

10. In using this Classification the question will be, What does a Custom, or a Saying, or a Poesy chiefly illustrate—a Cosmical Idea, or a Moral Notion, or an Historical Memory? According to the answer will be the *row* of pigeon-holes into which it goes. And according to the further question, What sort of Cosmical Idea, or Moral Notion, or Historical Memory does the Custom, Saying, or Poesy chiefly illustrate?—will be the *particular* pigeon-hole into which it goes. No doubt in this, as in even the most perfect Natural Classification, questions will often arise as to where a fact had best be placed in order most truly to indicate its character and relations. But just consider what would be the result of assigning their true psychological and sociological place to even the majority of folk-lore facts. Take, for instance, those which are, perhaps, the most important of all, because of their instructiveness with respect to contemporary social questions—those folk-lore facts chiefly illustrative of Moral Notions. Suppose the Usages, the Saws, the Songs and Stories, illustrative of these notions, all arranged for comparative study, in the various sub-classes of sexual, domestic, and communal Moral Notions, would not the history of Morals have probably to be entirely rewritten? Such are the aims which a scientific study of Folk-lore must have in view, and which are, indeed, implied in the conception of it as a Descriptive Science. But a Descriptive Science is a Classificatory Science, and to exist as such a science, Folk-lore must have as its backbone, not an empirical, but a scientific Classification of folk-lore facts. And I trust, therefore, that my high conception of the possible future of Folk-lore, and earnest desire to contribute in some degree to the realisation of that possible future, may excuse an expression of profound regret—joined as it is with the heartiest recognition of all the good work done by the

Director—that the Folk-lore Society has sanctioned his avowedly empirical, and hence unscientific, Classification of the phenomena with which, at the same time, it claims to deal scientifically. It must, however, be added that it is just such systematic and comparative tabulation and analysis, as appears from Mr. Nutt's article to have been initiated by the Society, that is the first and most indispensable step in the process of verifying, and hence doubtless both amending and developing, such a suggested Scientific Classification as that now submitted to Folk-lorists.

11. I would now, in conclusion, offer some remarks on the opposed theories of Evolutionism and Adaptationism, as Professor Gruppe, or Revelationism, as Mr. Nutt, less happily, as I think, calls the Borrowing theory. The science of Folk-lore, as a descriptive and classificatory science, has indeed, in strictness, nothing to do with these or any other theories of causes—having but to provide classified facts for the working out of such theories. But still, as none are likely to consider Mr. Nutt's remarks on these theories, in his article on *Recent Folk-lore Research*, irrelevant, I trust that the remarks on the subject, which I would now offer, may also, perhaps, not be considered an irrelevant conclusion to a paper on *The Science of Folk-lore*. For if that descriptive science has nothing to do with these theories, the historical science of Religions, to which the science of Folk-lore—as the science of the expressions of folk-life—is immediately ancillary, has very much to do with these theories. Having obtained from Folk-lore its classified facts, the question immediately arises, How are we to regard these facts in relation especially to the great classic mythologies? The so-called "Evolutionist" answers that the classic mythologies are but a development of the cosmical ideas, common to all savages, and expressed in folk-ceremonies, folk-spells, and folk-poesies. The "Adaptationist", on the other hand, maintains that the classic and all the other great mythologies have, with more or less intermixture, been derived from one or more definite centres of origin, and hence that similarities in religious beliefs and expressions of belief are to be explained by a theory, not of aboriginal mental constitution, but of foreign religious borrowing. I must here confine my criticism of these theories to pointing out a fact which both of them have ignored. And the result may, perhaps, be a reconciliation of these two theories, or, at least, a more discriminating recognition of what is true in each.

12. The fact to which I allude is that not only do we find in

the oldest caves with human remains, skulls, indicating great, if not indeed extreme, cerebral differences between human Races, from the earliest age of man's existence; but that, still more clearly and definitely do we find, in the historic origin of Civilisation in the Nile- and Euphrates-valleys, somewhere between seven thousand and ten thousand years ago, at least two Races, differing from each other in physical and mental characteristics to the very same degree, and in the very same way, as the White Race of Civilisation now differs from the Coloured and Black Races of Barbarism. I have elsewhere collected the immense amount of evidence now available for proving that the founders of the Egyptian and Chaldean Civilisations were, though neither Semites nor Aryans, yet a White Race,[1] with as high cerebral and other characteristics as the purest-bred Aryan of the present day, yet separated from their subjects by at least as great an interval as, or indeed, because of less intermixture of blood then, by a greater interval than now anywhere separates White Rulers from Coloured and Black Subjects. We may *imagine*, if we like, that men were once all of one Race, with identical tendencies and equal capacities. But we *know* nothing of man save as belonging to most contrastedly different Races. Yet the theory of the so-called Evolutionists seems to postulate, not difference but identity in the Races of Men. I venture, therefore, to refer to their theory as but a so-called "Evolutionism", seeing that it lacks the distinguishing characteristic of Darwinian Evolutionism, namely, a due recognition of *difference of conditions* as the *sine quâ non* of social, as of organic, changes. The influence of a Higher Race is, in the development of Sociological Species, what the influence of new Geological Conditions is in the development of Biological Species. And I submit that only a theory in which a *Conflict of higher and lower Races and Classes* figures as the chief condition of intellectual, moral, and social changes can properly be called a scientific theory of sociological Evolution.

13. With such views, already published,[1] it was with very great interest that I read, in 1888, Professor Gruppe's *Culte und*

[1] In *Greek Folk-songs* (1st Edit. 1885, 2nd Edit. 1888), and in papers read in 1887, at the April meeting of the Royal Historical Society, and at the September meeting of the British Association, and which, considerably elaborated, are now in the press for the *Transactions of the R. Hist. Soc.*, under the title of *The Archaian White Races and their Traditions.* These races I have thus defined: "By Archaian White Races I mean White Races non-Semitic and non-Aryan; and by White Races I mean Races with either long or short heads (dolichocephalic, or brachycephalic), high noses, unprojecting jaws (orthognathic, not prognathic), long hair and beards, and light-coloured skins."

Mythen, to which my attention had been directed by the more provoking than satisfying account of it in the *Classical Review*. It need hardly be said that I hailed his work as giving immense confirmation to the views which I had already published as above noted. But while the *Grundgedanke* of Professor Gruppe's book is precisely that of my *Northern Hellas* (of which the first part was printed in 1886-7, though it is not yet published), namely, "Dass die Verwandtschaft der griechischen Culte und Mythen mit den orientalischen nicht auf gelegentlicher Uebertragung, sondern auf einer ununterbrochenen und allgemeinen Culturgemeinschaft beruht"—yet he does not prove his case by those ethnological facts by which alone it can, as I think, be scientifically proved, and by those facts more particularly which connect the Pelasgians with the Archaian Races, the founders of the Egyptian and Chaldean Civilisations. It was the impression made on me by finding how great is the number of Lárissas which connect the Lârissa of Thessaly, where I studied the Pelasgian problem in 1880, with the Lârissa of Chaldea, that directed me to this course of ethnological and archæological research ; and the further I have gone the more convinced have I become that I am on the right track for a solution of the problems which lie at the root, not only of Hellenic, but of European Civilisation. But even since the most recent of the works of De Quatrefages on what he calls the Allophyllian, and I the Archaian, White Races,[1] a great number of memoirs have added to the evidence that already proved the existence all over the world of non-Semitic and non-Aryan White Races, presumably of the same stock as that of the founders of the Egyptian and Chaldean Civilisations. It is by the facts of the ethnological distribution of these White Races that the similarities of religious beliefs, rituals, and symbols are, on my Archaian theory, chiefly to be explained. And, as I may, perhaps, on some future occasion, be allowed an opportunity of indicating in the *Archæological Review*, it is by the facts of the settlement of higher White among lower Coloured and Black Races that probably Exogomy, and more certainly the extraordinary supremacy accorded to Women[2] in what may, perhaps, be distinguished as the Amazonian Civilisations, are also, on this theory, chiefly to be explained.

[1] *Les Polynésiens et leurs Migrations*, 1866 ; *Rapport sur les Progrès de l'Anthropologie en France*, 1866 ; and *Hommes fossiles et Hommes sauvages* 1884.

[2] See, for instance, Giraud-Teulon, *Origines du Mariage, et de la Famille* ch. xv, *La gynécocratie.*

J. S. Stuart Glennie.

HENNESSY'S TODD LECTURES.

Vol. I, Part I. MESCA ULAD; OR, THE INTOXICATION OF THE ULTONIANS. With Translation and Introductory Notes by W. M. HENNESSY. 8vo, xvi, 58 pp. Dublin, 1889.

A MELANCHOLY interest attaches to this posthumous publication of the thorough and accomplished scholar whose name appears on the title-page. As is the case with too many other native scholars, the amount of printed work which Hennessy has left behind him represents most inadequately his knowledge of the history and literature of early Ireland. He was one of the few remaining depositaries of the traditions handed down through O'Donovan and O'Curry, those last of an almost unbroken line of great antiquaries reaching up to the early Middle Ages. Modern philological and historical criticism has done and can do much for the elucidation of the oldest records of the Irish races, but it cannot dispense with the native tradition. Every gift from the hand of a pupil of O'Curry's is therefore most welcome, and it is with lively satisfaction that I note the promise of the Royal Irish Academy to revise and publish Hennessy's remaining Todd Lectures, with as little delay as possible. If, however, this feeling of satisfaction is to be justified, the future lectures must be "revised and published" in a very different way from the present one. I do not hesitate to say that this publication reflects the utmost discredit upon the Royal Irish Academy, and is most unfair to Hennessy's memory. The lectures were delivered in 1882; the preface is signed 1884. The long delay in publishing may reasonably be attributed to the lecturer's feeling that the text translated by him demanded far more comment, both critical and exegetical, than is here given it. The present introduction is quite insufficient, restricted as it is to three or four points of comparatively minor importance; and those historical and topographical notes which the editor was so well qualified to supply are almost entirely missing. At the very least, the historical conditions of the tale, and its relations to other texts of the same saga-cycle, should have been clearly set forth.

The text is found in two fragments of very unequal length, contained in the two oldest Irish vellums, the *Leabhar na h-Uidre*

(LU), and the *Book of Leinster* (LL). The latter supplies pages 1-46, the former pages 47-55. The editor is, however, incorrect in saying that there is a hiatus between the conclusion of the LL fragment and the commencement of the LU fragment. The relation between the two is much more interesting than this statement would imply; to rightly appreciate it a summary of the tale must be given.

The Tuatha de Danaan excite a quarrel amongst the province of Uladh regarding its division into three parts, in the days of Conor, son of Fachtna Fathach, one-third belonging to Conor, one-third to his *dalta* Cuchulaind, son of Sualtam, one-third to Fintan, son of Niall Niamglonnach. This division lasts a year, until the feast of *Samhain* (All-hallows), when Conor gives a great feast, to which Cuchulaind and Fintan are bidden. Sencha, Conor's chief *ollamh*, and Cathbad the druid, persuade Cuchulaind and Fintan to give up their thirds for one year to Conor, in return for which the two heroes exact that the king come "to drinking and delight" with them. A quarrel arises as to who shall have the precedence in feast-giving; Sencha settles it by assigning the first half of the night to Fintan, the second half to Cuchulaind. All Ulster meets at Fintan's, "each noble with his lady; each king with his queen; each musician with his accompaniments; each hunter with his huntress." When midnight arrives, Cuchulaind calls those present to follow him, but, instead of leading them to his home, he directs his course straight through the centre of Ireland, until they arrive in the territory of Curui mac Daire, the Munster chief. Cuchulaind alone knows the district, but when he offers to guide the host back out of the hostile land, the Ulster braves reject the offer with scorn —they claim to be a day and a night where they are, 'twere a sign of defeat for them to depart at once. The host then proceeds to Tara-Luachra, the stronghold of Curui mac Daire. Here the Munster hero is feasting Ailill and Medb, King and Queen of Connaught, who have given him their youngest son in fosterage. Medb alone, the "provident heroine", stations on the walls as watchmen two druids, who dispute as to the nature of the Ulster host, all question as to which is, however, settled by the full fierce rush of its advance,—"there was not left a spear on a rack, nor a shield on a spike, nor a sword in an armoury that did not fall down." The inmates of the castle are moved by this clamour, the two watchmen are called in and give a detailed description of the Ulster host, Curui naming each hero as he is described. Counsel is taken of a druid as to what should be done in respect of these formidable

visitors, and this is the counsel: that an iron house be prepared, and surrounded with all manner of inflammable materials, and seven chains of good iron firmly fastened to the seven pillar-stones on the green outside. The Ulstermen are then bidden welcome from Medb, and from Ailill, and from Curui, and Cuchulaind goes to pick out a house for his comrades, and he picks out the largest one, which is the iron house. And when all are inside, and it is night, the chains are made fast, and thrice fifty smiths are brought with their bellows to blow the fire, which is kindled from above and from below. The Ulstermen feel the heat, and Cuchulaind, plunging his sword through the walls, discovers them to be made of iron. . . .

The LL fragment ends here; the LU one opens with the dispute of the Ulster heroes who should select the house offered them for their entertainment by the Munster chief. Cuchulaind is chosen, in spite of a gibe by Fintan at his fairy birth. He chooses a house which is not described as being of iron, nor is anything said of preparations made to roast them alive in it; but ale and food are sent them till they are intoxicated, and they are locked in. Cuchulaind leaps upwards, carrying off the roof as he does so, and then kicks down the door from the outside. The Munster warriors gather around the invaders and attack them, Ailill and his seven sons remaining neutral. The Ulstermen are victorious, and plunder the *dún*, and leave alive only three of the enemy. One of these, to be revenged, persuades a female satirist, Richis, to come with him and attack Cuchulaind. He is to be overcome by the following device. Richis takes off her clothes, whereat the Ulster hero veils his face that he may not see her nakedness, and the Munsterman attacks him in the meanwhile. But Cuchulaind's charioteer slays Richis with the cast of a stone, and thus frees his master, who is of course victorious. The host then comes to Cuchulaind's *dún*, where it is entertained for forty days and nights. And Conor was after without destruction of his kingship whilst he lived.

It is evident that in this, as in so many other cases, the two great Irish vellums have preserved varying redactions of the same saga. Unfortunately, the portion common to both is very small, and does not allow any certain conclusion as to the relative age of the two versions. So far as one can judge, the LU version, if complete, would be the longer and more detailed of the two, and it would probably be found, if we had the close of the other version, that it is less favourable to the Ulstermen, who doubtless escape from their prison, but I think with difficulty, and without that com-

plete slaughter of their enemy described in LU. So much light has been thrown by Professor Zimmer upon the nature and growth of the Irish sagas by the comparison between the varying redactions preserved in the oldest MSS.,[1] that it is greatly to be regretted our two versions do not overlap more than is the case. Any later copies of the tale, should such exist, should be carefully examined to see if they allow us to recover the LU redaction in its entirety.

In the meantime, a close examination of the texts, even in their present fragmentary state, leads to the following results. In the first place, the points of agreement will be noted; then those points in which the two versions certainly differ from each other; and lastly, those in which there is probably difference without its being possible to affirm decidedly that this is the case.

Points of Agreement.—The general outline and march of the story are the same in both versions, as may be gathered from the final words of LU: "Conor was after without destruction of his kingship whilst he lived," and from Fintan's jeer at the supernatural descent of Cuchulaind; the first passage presupposing the opening threefold division of Ulster, and the consequent bringing of the province under the sole sway of Conor, whilst the second bears witness to that rivalry between Cuchulaind and Fintan which is so prominent in LL.

Certain Points of Difference.—These are many and important. I have already noted that LU shows no trace of the roasting alive incident;[2] again, whilst *Trisgatal* is the name in LL of the champion

[1] *Keltische Studien, No.* 5. *Ueber den compilatorischen charakter der irischen sagentexte im soggennanten Lebor na hUidre* (*Z. f. vgl. Sprachforschung*. Vol. xxviii, Parts 5 and 6, 1887). Quoted throughout this notice as Zimmer.

[2] A similar incident is found in a 13th century Irish MS. (Rawlinson, B. 502, f. 72): Labraid, King of Leinster, to avenge himself upon Cobthach, builds a house of twice melted iron, and invites therein Cobthach and thirty other kings. These refuse to enter it unless Labraid's mother or Labraid's fool precede them. The mother, though foreknowing her fate, goes into it "for her son's honour", the fool, for the "blessing of the Leinstermen, and for freedom to his children for ever." Once inside—"fire for you", says Labraid, "and ale and food." Nine men chain the door, and thrice fifty smiths' bellows are blown round the house. Those within call on Labraid to save his mother, but she bids him heat on and exact atonement for her. The same expedient is adopted by Matholwch in the *Mabinogi* of Branwen, daughter of Llyr, to rid the land of the mysterious and monstrous lake-folk who harass it (cf. *Folk-lore Record*, vol. v, p. 5). The relations of Wales, as described in the *Mabinogi*, are with Leinster, and it is thus less remarkable that this incident should be found in that collection of the race-sagas made in Leinster, and betraying not unfrequently a spirit adverse to the pre-eminence of the Ulster braves and wizards.

of Conor's house—"he kills three enneads by his fierce looks"—LU calls him *Triscoth.* When the Munstermen attack the house, he looks so fiercely at the first two that they faint; as for the third, who withstands his glance, "he took him by the leg, and kept dashing him against the three enneads that were in the house, so that not one of them escaped alive."[1] Conor's fool is called Roimed by LL, Reorda by LU; Dubthach, although described by LL as the chafer (*dael*) of Ulster, is yet spoken of by his proper name, but LU thrice alludes to him simply as Daeltenga (chafer-tongue), once as Dubthach Daeltenga and only once as Dubthach.[2]

Possible Points of Difference.—LU mentions four heroes whose names do not occur in the elaborate description of the Ulster host found in LL, namely, Furbaidi Ferbend (Conor's son, the absence of whose name from the LL list is remarkable), Nia-natrebuin-cro, Dub, and Rodub, whilst no part is played in the final *mêlée* by any of the heroes described so minutely and complaisantly by LL. Moreover, Dubthach seems to take in LU the place occupied by Bricriu in LL; he is the bitter-tongued reviler, the counterpart of Thersites, of Conan in the Ossianic legend, or of Sir Kay in the Arthurian romance.

I have summarised (*ante*, vol. ii, p. 117) Professor Zimmer's researches respecting the relation of the two oldest Irish MSS. It may suffice here to say that he shows strong reason for attributing the LU version (copied at the beginning of the 12th century) to Flann Manistrech († 1056), the greatest Irish scholar of the 11th century, and for regarding it as an abridged harmony from earlier MSS. now lost, but from one of which LL was copied in the middle of the 12th century. The diplomatic tradition is thus carried back to the beginning of the 11th century; and when it is borne in mind that not only the 12th century scribes of both MSS., but Flann himself, the profoundest antiquary of his day, frequently misunderstood the texts, it seems no rash conclusion to attribute these sagas substantially to the 7th-8th centuries. Professor Zimmer has also shown that not only the date of the redaction as we now have it,

[1] This method of dealing with one's adversaries has remained in traditional favour in the Highlands. Thus, when Conall Gulban finds himself in the house of the Tamhasg, the best warriors of Lochlann, "he seized on the one of the slenderest shanks and the fattest head"; at the end of the fight "he had not a jot of the one with whom he was working at them, but what was in his hands of the shanks." (Campbell, iii, p. 220.)

[2] Zimmer shows that LU frequently contaminates two varying accounts of the same saga. It is possible that such a contamination may be distinguished here by the different forms of Dubthach's name.

but also the date of composition, may frequently be reached by an examination of the allusions in the text (cf. *ante*, vol. ii, p. 138). Statements such as that the three sons of Uisnech are "the three torches of valour of *Europe*"—the description of Lugaid as son of Leit, King of *Dál-araide*—Dubthach's prediction to the imprisoned Ulster braves "that the men of Eri and *Alba* shall possesses their land"—of which the first two come from LL, the last from LU—show that both our texts received their final shape in at least the second of the three periods of Irish saga-telling distinguished by Professor Zimmer, that one, namely, which reaches from the middle of the fourth to the end of the seventh century, and during which the Irish swarmed out of Ireland, plundering and settling on the coasts of England, Wales, and Scotland.

Bearing in mind the approximate date of composition of both forms of our saga, it is interesting to note how different are the historic conditions from those we find in other stories of the Ulster saga-cycle. The threefold division of Ulster, although not actually contradicted by other texts, is yet in grave disaccord with them so far as Cuchulaind is concerned. The latter is universally described as Conchobor's nephew, his mother being Dechtire, sister to the Ulster chief, and his father either the Ulster chieftain Sualtam or the god Lug. He is brought up by Conchobor (Conor); and a passage in the *Tain bo' Cuailgne* (Zimmer, *l. c.*, p. 449) describes how after his first hero's feat, on his return to Emain Macha, he resumes his wonted place between his uncle's knees. The relations between the two are of quite a different nature from those of quasi-equality described in our text. The silence of the *Annals of the Four Masters* and of Keating concerning the state of affairs in Ulster described in our text, is less remarkable, as both follow in their record the line of the high kings of Ireland, and pay, the former scarcely any, the latter comparatively little, attention to that Ulster court the fortunes of which are the subject of the most considerable heroic saga of any modern European race. Yet this silence of the annalists must be taken in conjunction with the different state of affairs presupposed by the other saga-texts when estimating how far our tale may have a solid historic basis. I have indicated (*ante*, vol. ii, p. 116) my disbelief in there being any perceptible amount of historic truth in the Ulster saga, and I would simply point out here the difficulties in which those who take these hero-tales as a record of fact are involved. Cuchulaind is Conor's nephew, and most of the Ulster heroes figure in the story of his birth, amongst others, Bricriu and Conal Cearnach, both of whom are personages

in our tale—at the time of the *Tain bo Cuailgne* he is seventeen years old, but the *Tain* was undertaken by the Connaughtmen in conjunction with Fergus and the Ulster exiles after the treacherous slaying of the sons of Usnech ; these latter figure in our story, which must therefore precede by at least three years the *Tain*, and yet Cuchulaind is represented in it as a ruler on almost equal terms with Conor. In fact, the chronology of the whole cycle cannot bear a close scrutiny. An historic fact, however, such as that of the threefold division of Ulster, which is mentioned in one text only, and ignored by others, is for that very reason likely to have some basis of truth ; and, in so far as the mythic hero-tales of the Celtic race have been shaped and coloured by historic events which took place in the North of Ireland about the beginning of the Christian era, I am inclined to think that the present text gives as faithful an idea of these events as can be gathered from any portion of the saga-cycle.

Two other points deserve notice in this connection. Conor, instead of being called, as is usual, by his mother's name (Conchobor Mac Nessa), is styled Mac Fachtna Fathach. This is also the case in other stories of the cycle, *e.g.*, in the fate of the sons of Uisnech, and in the *Tochmarc Emer* (*ante*, vol. i, p. 68). But the matronymic style is more frequent, and is rightly cited by M. Muret in *Mélusine* for April as a probable survival of matriarchal custom amongst the ancient Irish. The other point has been noted by Mr. Hennessy. Cuchulaind is described in the LL fragment (p. 29) as a "little black-browed man". This description is all the more striking as the LU fragment states that in the final *mêlée* no one would wound the hero "because of his beauty", a fact which recalls to us the Sandde Bryd-angel of Kilhwch and Olwen—"no one wounded him in the battle of Camlan, all deemed him to be an auxiliary angel." Allusion is also made to his fair shining hair, "tho' 'twere a head of gold he had", says an adversary. The LL description is not, however, so singular as one might gather from Mr. Hennessy's remarks. Thus, the *Tochmarc Emer* (*ante*, vol. i, p. 72) describes Cuchulaind as a "dark sad man", and contrasts him with his charioteer, "a very slender, long-sided, much freckled man, with very curly bright red hair". Professor Meyer notes on this passage that other LL texts speak of Cuchulaind as fair. What is important to remember is, that just as we have two varying accounts of the personal appearance of the Ulster hero, of which the usual one makes him the supreme representative of manly beauty as the Celtic invaders of these isles imagined it, and gives him all

the characteristics of the pan-Aryan sun-god or sun-hero, whilst the other figures him in a directly opposed way, so we have two accounts of his achievements. In the more common one he is, as Tighernach says, "fortissimus heroum Scotorum", as much the pre-eminent warrior of his race as Achilles among the Greeks or Siegfried among the Germans. But a certain number of stories have come down to us in which he is represented as worsted by his adversaries, notably by the Munster brave, Curoi mac Daire. The marked opposition between the North of Ireland and the remaining provinces, which is such an important element in the national sagas, represents, I believe, the clash of hostile mythologies as well as of hostile races; the Southern Irish versions of these sagas thus retain traces of the time when the great hero of one branch of the race, the hero whose career reproduces the older sun-god myth, was by another branch of the race looked upon as a representative of the dark and evil powers of nature.

One of the most interesting features of any early Irish saga is the witness borne to the homogeneity of Celtic romantico-mythic tradition, from a period well-nigh prehistoric down to our own time. Campbell's *Tales* are the best commentary upon the Ulster sagas, as they are upon the *Mabinogion*. Instances have been noted in the course of this article, but the kinship of tone, and frequently of minor incident, which exists between our text and the *Mabinogi* of Kilhwch and Olwen, deserves more than a passing word. Schulz, Renan, Villemarqué, and many others have noted the weird archaic effect of that remarkable tale. Its characteristics are, however, simply those of Irish story-telling generally, though it must be admitted that no Irish tale that has come down to us has anything like the same artistic merit. The catalogue of the Ulster warriors in our text is built up upon the triadic lines of Kilhwch's enumeration of Arthur's court, lines which are partly followed in the list of the Ultonian court, quoted at the end of the *Tochmarc Emer* (*ante*, vol. i, p. 306). Passages such as "they would not remove the dew from the grass for the celerity and lightness with which they came" (p. 30); or the one detailing the arms of the Ulster heroes: "three knightly red-brown shields, three immense, whizzing, warlike spears, three heavy, stout-striking swords"; or again, the description of Uanchend Arritech: "his eleventh year is not complete, and he never ate his portion without offering it to everyone who might be in the house", will be recognised as familiar by all acquainted with Kilhwch and Olwen. The remains of early Welsh literature are probably too scanty to allow us to decide

whether this marked similarity of style and colouring is due to kinship of æsthetic feeling and original community of æsthetic methods between Gael and Kymry, or whether it is not rather due to the direct influence of the great Irish saga-school of the eighth-tenth centuries upon the Welsh writers.

Uanchend Arritech is an interesting personage. He is the son of the three leaders of battle of the Ulstermen—Uma, son of Remanfisech, Errgi Horsemouth, and Big Celtchair. He thus recalls Lugaid, who was the son of Clothru, and of Bres, Nàr, and Lothur (War, Shame, and Hell, as Prof. Rhys Englishes them, *Hibb. Lèct.*, p. 478). Have we here a trace of primitive polyandry, or is this a mythological commonplace handed on unthinkingly from one storyteller to another?

I have only been able to deal, and that slightly, with a very few of the many interesting features presented by this tale. An exhaustive and adequate commentary would swell the pamphlet to treble its present size. Meanwhile, we must be thankful for the translation. Celtic scholars are far too apt to waste their energies upon grammatical and metrical refinements, or upon the Christian literature of the mediæval Irish, the interest of which is altogether secondary. It is the heroic sagas and the archaic customals of the Irish which make their early literature the most valuable and instructive of any modern European race; accurate and entire renderings of these it is that are asked for from Celtic scholars by every student of the past, whether of manners or arts, of beliefs or customs, for no other class of documents supplies more genuine information respecting the early social condition of the race.

ALFRED NUTT.

CORRESPONDENCE.

BIBLICAL ARCHÆOLOGY.

[*Supra*, p. 1.]

SIR,—I regret that Mr. Jacobs in his article on Biblical Archæology has scarcely done justice to the Palestine Exploration Fund in a few passages. He does not seem well acquainted with their more serious efforts, such as the *Memoirs of the Survey*, etc. It is true we have only a few Hebrew inscriptions, though I think the Moabite stone might have been mentioned, and the tomb texts which I have described in *Syrian Stone Lore*, as well as all the Phœnician texts and certain seals not mentioned by Mr. Jacobs, which, together with uninscribed monuments, make up a respectable total. He says nothing of the "Hittite monuments" of Syria, concerning which, on the 26th, I read a further paper to the Anthropological Institute.

Again, he is rather hard as to geographical discoveries. The 1,500 names include Bible names in Greece, Italy, Asia Minor, Chaldea, Persia, Egypt, but the P. E. F. work is confined to Palestine. In Western Palestine there are only about 800 names at most, and 400 of these were known before the survey. I think 140 in addition was by no means a meagre result, especially as the boundaries of tribes and provinces have also been defined. The new departure of the P. E. F. will, I hope, lead to some results of much interest; but I think, in such a review, notice might have been taken of the curious rude stone monuments discovered by the explorers in such numbers and described in their publications. Also of the folk-lore and superstitions recorded in the *Memoirs*, and the accounts of the peasant life and customs. As regards eating the hare, for instance (p. 16), it has been noted that it is not eaten by either Jews, Christians, or Arabs in Palestine; and many survivals of the old paganism of Palestine have been recorded by this Society.

As there is, I think, no institution that has done as much as the P. E. Fund for Palestine Archæology, I do not see why its labours should be minimised. The very idea of studying the Old Testament independently, by monumental evidence, as a check on critical exegesis, has been the outcome of Palestine exploration, and has hardly been accepted even now as the method which is to be most important in the future.

C. R. CONDER.

A JEW FINANCES THE CONQUEST OF IRELAND.

SIR,—In my article on "Jews in the Pipe Rolls of the Twelfth Century" (*Arch. Rev.*, Feb. 1889, vol. ii, p. 399), there is an item, the full significance of which escaped me at the time of going to press. It is No. 16, and runs as follows:

"Josce, Jew of Gloucester, owes 100 shillings for an amerciament for the moneys which he lent to those who against the king's prohibition went over to Ireland. 16 Hen. II (1169-70)."

This is clearly a reference to Strongbow's expedition in August 1170, which resulted in the conquest of Waterford and Dublin, and roused Henry's fears that Richard of Striguil would create an independent kingdom in Ireland. The expedition would have been impossible without financial help, for Richard had no independent means, and William of Newburgh (ed. Howlett, Rolls Series, i, 167-8) states that his chief motive in going to Ireland was to escape from his creditors. "He went in defiance of an express prohibition from Henry; and it was on hearing of his victories—*i.e.*, some time in the latter part of 1170—that Henry confiscated his estates" (Miss Norgate, *England under the Angevin Kings*, ii, 103; cf. Barnard, *Strongbow's Conquest of Ireland*, p. 40). But for the aid of Josce he could not have gone, and the whole incident affords another illustration of "the economic interpretation of history". It also shows how important it was for the king to have absolute control of the transactions of the Jews, the only bankers by whom great enterprises could be financed.

JOSEPH JACOBS.

ANCIENT MONUMENTS.

THE following letter has been distributed among gentlemen likely to be interested:—

THE ARCHÆOLOGICAL REVIEW, 270, STRAND.

DEAR SIR,—We are desirous of learning the amount of destruction of Ancient Monuments that is going on in the country, and venture to appeal to you to answer, from your intimate knowledge of the archæology of your county, the following questions:

(1) What tumuli, or other stone monuments, have been recently removed or destroyed?

(2) What churches have been "restored"?

(3) What historic monuments are being left exposed to the weather without protection?

(4) What records, county and parish, are being left uncared for?

Kindly mention in each case any details which have come under your notice. Any use that will be made of your replies will be authenticated by your name, unless you express a wish to the contrary.

I remain, dear Sir, yours faithfully,

G. L. GOMME, *Editor.*

If any reader of the *Archæological Review* would kindly send answers to the above questions, the Editor will be grateful.

All communications should be directed to "The Editor, Archæological Review", 270, Strand, W.C.

The Editor cannot undertake to return rejected MSS. unless a stamped directed envelope is sent for that purpose.

The Archaeological Review.

VOL. III.] JUNE, 1889. [NO. 4.

TOTEMISM IN BRITAIN.

THE geographical diffusion of totemism is so wide, including within its area a large proportion of the non-Aryan races of the world, and with regard to ancient nations it "may be regarded as certain for the Egyptians, and highly probable for the Semites, Greeks, and Latins,"[1] that the possibility of it being found among the survivals of archaic custom in Britain might almost be taken for granted. Mr. Grant Allen[2] and Mr. Lang[3] have pointed out some of the evidence by which it may be inferred that totemism existed among the tribes who conquered Britain, and the opinion of two such distinguished authorities must be duly considered. Still I would venture to affirm that the systematic examination of the subject has not yet been attempted. The evidence has been almost wholly confined to that obtainable from the patronymic names of the early Anglo-Saxon settlers and their local distribution, "precisely like what results in America, Africa, and Australia, from the totemistic organisation." The evidence of folk-lore has not been brought forward, and, granting all that Mr. Lang and Mr. Allen have said, it only proves that the totem organisation, though surviving as a name-system, was at its very last stage of existence, and did not pass forward into the peasant-life of the nation after the tribes had settled down—did not, that is, assume anything like the same proportion of influence on the higher civilisation that followed it which, as Mr. McLennan has proved, existed among the nations of antiquity.[4] At present it is certainly open to the opponents of the theory, like Canon Isaac Taylor and Mr. See-

[1] Frazer's *Totemism*, 91-95; cf. Scot's *Discoverie of Witchcraft*, 1584, p. 525.

[2] *Anglo-Saxon Britain*, 79.

[3] *Custom and Myth*, 274; *Introd. to Aristotle.*

[4] *Fortnightly Review*, 1869-70.

bohm, to point out that the non-existence of totemistic relics in British custom must either suggest a very sudden and universal overthrow of the primitive system, or that, as no signs of this are forthcoming, the more reasonable hypothesis is that it had never existed in Britain. An examination of the evidence of folk-lore, however, will, I think, add so much to the evidence brought forward by Mr. Lang and Mr. Allen that all opposition to the suggestion that relics of totemism are to be found in Britain must cease. But I will add one caution at this point. We must not too hastily conclude that these surviving relics can be traced either to the Teutonic or Celtic branches of the Aryan family who occupied this country.

There are two methods of investigation into this subject: first, that actually adopted with so much success by Professor Robertson Smith in his examination of the survivals of totemism among the Semitic races; and secondly, that suggested by the exhaustive analysis of totemism with which Mr. J. G. Frazer has enriched anthropological knowledge. The former lays down rules for detecting totemistic principles in a people which has long advanced beyond the totemistic stage of development; the latter investigates living totemistic organisations, and enables us to form a code of rules for ourselves, by which we may be guided in detecting survivals of the totemistic organisation. Of these two methods the latter would necessarily be the more scientific, because it would be obtained by a strictly inductive process, while the former was constructed for the immediate purpose of the author, and though no doubt upon inductive principles, yet the process of construction is not made known. One other difference between these two methods of investigation I am desirous of pointing out, namely, that the first is somewhat elastic in its demands for details of evidence, while the second is exacting in its production of type-forms of totemistic beliefs, and thus enables us to trace out shades of departure from the type-form in the survivals in modern custom.

I have been thus careful to state the distinctions between these two methods of investigation, because I am anxious to emphasize the significance of the very first example of totemism in Britain which I shall produce. I shall set down Professor Robertson Smith's formula, and I shall test the British evidence by this standard, with the result, I think, of showing that the British example far exceeds in the perfection of its details the standard which was sufficient to trace out, and I think adequately, the survivals of totemism among the Semitic races of Arabia. We

therefore start off with this fact, that the British evidence is more perfect than the Arabian. Mr. Robertson Smith's conditions are as follows: "(1) The existence of stocks named after plants and animals"—such stocks, it is necessary to add, being scattered through many local tribes; "(2) the prevalence of the conception that the members of the stock are of the blood of the eponym animal, or are sprung from a plant of the species chosen as totem; (3) the ascription to the totem of a sacred character which may result in its being regarded as the god of the stock, but at any rate makes it be regarded with veneration, so that, for example, a totem-animal is not used as ordinary food. If we can find all these things together in the same tribe, the proof of totemism is complete; but even when this cannot be done, the proof may be morally complete if all the three marks of totemism are found well developed within the same race. In many cases, however, we can hardly expect to find all the marks of totemism in its primitive form; the totem, for example, may have become first an animal god, and then an anthropomorphic god, with animal attributes or associations merely."[1]

The British example of a totem-stock which I am anxious to test by this standard occurs in Ireland. It was noted by Mr. G. H. Kinahan in his researches for Irish folk-lore, and is mentioned quite incidentally among other items, the collector himself not fully perceiving the importance of his "find". This really enhances the value of the evidence, because it destroys any possibility of an objection to its validity—a really important matter, considering the remarkable character of this survival of totem-stocks in Western Europe. The exact words of Mr. Kinahan are as follows:—

"In very ancient times some of the clan Coneely, one of the early septs of the county, were changed by 'art magick' into seals; since then no Coneely can kill a seal without afterwards having bad luck. Seals are called Coneelys, and on this account many of the name changed it to Connolly."[2] The same local tradition is mentioned by Hardiman in one of his notes to O'Flaherty's *Description of West or H-iar Connaught*,[3] but the note is equally sig-

[1] *Kinship and Marriage in Arabia*, p. 188.

[2] *Folk-Lore Journal*, ii, 259; *Folk-Lore Record*, iv, 104. Miss Fennell kindly informed me at the meeting of the Folk-Lore Society, where I read this paper, that she had frequently heard the islanders of Achill, off the coast of Ireland, state their belief that they were descended from seals.

[3] *Irish Archæological Society*, p. 27; there is a Seal Island off the coast of Donegal, Joyce, *Irish Place-Names*, ii, 282; and some Shetland legends of the seal will be found in *Soc. Antiq. Scot.*, i, 86-89.

nificant of its genuineness from the fact that the tradition is styled "a ridiculous story". It strengthens Mr. Kinahan's note in the following passage :—" In some places the story has its believers, who would no more kill a seal, or eat of a slaughtered one than they would of a human Coneely." Another mention of the same tradition is probably noted by a writer in the *Gentleman's Magazine*, who, describing a mythical creature called the " merrow", half fish and half woman says: " Some allegory is probably concealed under the fiction of certain families on the coast of Ireland being descended from these marine creatures."[1]

If this be compared with the formula laid down by Professor Robertson Smith for a complete proof of totemism, it will be found that it supplies (1) the existence of a stock named after an animal—the Coneelys after a seal ; (2) the conception that the members of the stock are of the blood of the eponym animal—the clan being changed into seals is the form of the survival of a descent from seals ; (3) the ascription to the totem of a sacred character, so that a totem-animal is regarded with veneration, and is not used as ordinary food—no Coneely can kill or eat of a seal without afterwards having bad luck. There is absolutely nothing wanting, then, in the identification of this piece of Irish folk-lore with the totem-system of early society; and if we can add to this any evidence of the wide distribution of the clan Coneely, we should have all the conditions of existence under which primitive totem-clans group themselves. The clan is mentioned both by Mr. Kinahan and by Mr. Hardiman as one of the oldest Irish septs ; and that it is widely spread, and not congregated into one locality, is to be inferred from the description of the tradition as prevalent in Connaught, especially from Mr. Hardiman's words, describing that "in some places" the story has its believers now, so that wherever the clan Coneely are situated there would exist this totem-belief—a fact proving its archaic origin in one remarkable particular, namely, that it is a tribal, not a local, cult.

Starting from this exceedingly perfect example of an Irish totem-tribe, we may with confidence attempt to reconstruct from the relics of an older life enshrined in folk-lore some of the less perfect examples of totemism. We have it in evidence that at least one clan, widely distributed throughout a certain district of Ireland, was named from a totem-animal, looked upon that animal as sacred, and believed themselves identified with it. If we cannot adduce any other examples of *clans* with the same beliefs and

[1] Gomme's *Gentleman's Mag. Library, Traditions*, 14.

associations, we may turn to the local successors of the clans, and see whether in the records telling us of the early history of these clans, or in folk-lore now attached to a particular locality, there are not some relics of totemism. Locality now has taken the place of kinship and common descent, and it is to local centres that we must of necessity turn.

The most remarkable *local* survival of a totem-tribe is to be found in Ossory. Giraldus Cambrensis tells an extraordinary legend to the following effect. "A priest benighted in a wood on the borders of Meath was confronted by a wolf, who after some preliminary explanations gave this account of himself: There are two of us, a man and a woman, natives of Ossory, who through the curse of one Natalis, saint and abbot, are compelled every seven years to put off the human form and depart from the dwellings of men. Quitting entirely the human form, we assume that of wolves. At the end of the seven years, if they chance to survive, two others being substituted in their places, they return to their country and their former shape."[1] Here is a saintly legend introduced to explain the current tradition of the men of Ossory, that they periodically turned into wolves. Fynes Moryson, in 1603, ridiculed the beliefs of "some Irish who will be believed as men of credit", that men in Ossory were "yearly turned into wolves".[2] But an ancient Irish MS. puts the matter much more clearly by the statement that the "descendants of the wolf are in Ossory";[3] while the evidence of Spenser and Camden explains the popular beliefs upon exactly the same lines. Spenser says, "that some of the Irish doe use to make the wolf their gossip";[4] and Camden adds that they term them "Chari Christi, praying for them and wishing them well, and having contracted this intimacy, professed to have no fear from their four-footed allies". Aubrey adds that "in Ireland they value the fang-tooth of an wolfe, which they set in silver and gold as we doe ye Coralls";[5] and Camden notes the similar use of a bit of wolf's skin.[6]

[1] *Topography of Ireland*, lib. ii, cap. 19. [2] *Hist. of Ireland*, ii, 361.

[3] *Irish Nennius*, p. 205; Lang's *Custom and Myth*, p. 265.

[4] *View of the State of Ireland*, p. 99. The significance of the word "gossip" is worth noting. Halliwell says it "signified a *relation* or sponsor in baptism, all of whom were to each other and to the parents *God-sibs*, that is, *sib*, or related by means of religion." This meaning does not seem to have died out in the days of Spenser, and his use of the word to describe the relationship of the men of Ossory to wolves is very significant. For the history of this important word, see Hearn's *Aryan Household*, 290.

[5] Aubrey's *Remaines of Gentilisme*, 204. [6] Camden, iii, 455; iv, 459.

In the local superstitions of Ossory, therefore, we have two of the cardinal features of savage totemism, as in the example of the clan Coneely—(2) the descent from the totem-animal; (3) the ascription to the totem of a sacred character and the belief in its protection.[1]

It is not to be supposed that among the relics of prehistoric life which folk-lore has preserved that many such examples as these could be forthcoming. Characteristics of a totem-tribe, whether in its tribal or local form, must of course have become scattered under the crushing influence of a thousand years of civilising powers. We may rest satisfied that from folk-lore we have been able to produce types of totem organisation, first in the clan form, and secondly in the local form, which meet more than the requirements for proving them to be survivals from primitive totemism, and we may now turn to Mr. Frazer as a guide for detecting the more scattered remnants of totem beliefs and customs. Mr. Frazer has adopted the same method of investigation practically as that adopted by Mr. J. F. McLennan in his papers on the worship of animals and plants in the *Fortnightly Review* of 1869-70. The formula which may be extracted from Mr. Frazer's review of the beliefs and customs incidental to the totemistic organisation of savage tribes, appears to me to properly fall into the following groups:—

(*a*) Descent from the totem.
(*b*) Restrictions against injuring the totem.
(*c*) Restrictions against using the totem for food.
(*d*) The petting and preservation of totems.
(*e*) The mourning for and burying of totems.
(*f*) Penalties for non-respect of totem.
(*g*) Assistance by the totem to his kin.
(*h*) Assumption of totem-marks.
(*i*) Assumption of totem-dress.
(*j*) Assumption of totem-names.
(*k*) Local cults derived from totemism.

My suggestion is that if we can classify under these heads anything like a reasonable proportion of the superstitions and customs attaching to animals and plants, and preserved to us under the title of folk-lore, we may fairly conclude that the origin of such superstitions and customs must be sought for in a primitive system of totemism which once prevailed among the tribes occupying these

[1] The dislike to killing wolves in Ireland is expressly mentioned by Fynes Moryson, *Hist. of Ireland*, ii, 367, and they were not extirpated until the last century.

islands. The clan Coneely and the Ossory wolves are proofs that such a system existed, and if such perfect survivals have been able to descend to modern times, in spite of the influences of civilisation, there is no *primâ facie* reason why the beliefs and customs incidental to such a system should not have survived, even though they are no longer to be identified with special clans. When once a primitive belief or custom becomes separated from its original surroundings, it would be liable to change. Thus, when the wolf clan of Ossory passes into a local cultus, we meet with the belief that human beings may be transformed into animal forms, as the derivative from the totem-belief in descent from the wolf. Fortunately, the process by which this change took place is discernible in the Ossory example; but it will not be so in other examples, and we may therefore take the transitional form supplied by the Ossory example as a key to the origin of similar beliefs elsewhere. Again, if we endeavour to discover how the associated totem-beliefs of the clan Coneely would appear in folk-lore supposing they had been scattered by the influences of civilisation, we can see that at the various places where members of the clan had resided for some time would be preserved fragments of the once perfect totem-belief. Thus, one place would retain traditions about a fabulous animal who could change into human form; another place would preserve beliefs about it being unlucky to kill a seal (or some other animal specially connected with the locality); another place would preserve a superstitious regard for the seal (or some other local animal) as an augury; and thus the process of transference of beliefs into folk-lore, from one form into other related forms, from one particular object connected with the clan to several objects connected with the localities, would go on from time to time, until the difficulty of tracing the original of the scattered beliefs and customs would be well-nigh insurmountable. But having once proved the existence of such examples as the clan Coneely and the Ossory wolves, this difficulty, though still great, is very much lessened. Our method would be as follows. We first of all establish that totem-clans did actually exist in ancient Britain, or whence such extraordinary survivals? We next examine and classify the beliefs and customs which are incidental to totemism in savage society, and having set these forth by the aid of Mr. Frazer's admirable study on the subject, we ascertain the parallels to these beliefs and customs in the folk-lore of Britain. And then our position seems to be very clearly defined. We prove that in folk-lore certain customs and superstitions are identical, or nearly so, with the beliefs and customs

of totemism among savage tribes, and we conclude that this identity in form proves an identity in origin, and therefore that this section of folk-lore originated from the totemistic tribes of early Britain.

In further proof of this conclusion, it is to be noted that no class of custom or superstition thus identified with totemism stands absolutely alone, but that the totem-objects belonging to one class reappear in other classes, each reappearance of the totem object in a different class, thus strengthening its claim to be considered one of the broken fragments in folk-lore of a once perfect system of totem belief and custom. To show this result as clearly as possible, after collecting the various items of folk-lore under the various heads of totem beliefs and customs, these being obtained, be it remembered, from Mr. Frazer's examination of existing totem-tribes, I proceed to tabulate the totem-objects under each head, and number them. This number I retain as a constant index of the totem-object throughout these researches, and by this process we obtain information as to the different phases of totemism which each object has retained in folk-lore, and so we may judge whether the argument used in support of the theory of a survival of totem-beliefs in Britain is arrived at from sufficient evidence, because it is in the nature of our research that the fragments of folk-lore collected under each heading derive their full force as evidence of totem-beliefs from their cumulative value; if we find a totem-object under one heading only, it may have got there from accidental causes; if we find the totem-object repeated under several headings, it must have got there from some cause common to all these phases of belief, and until some other cause is brought forward, it appears to me that totem beliefs afford the only explanation of the phenomena.

Before commencing this tabulation of the totem-objects in Britain, it would be well to note the totems of primitive tribes. Thus we have the opossum, emu, swan, duck, fish, waterfowl tribes, among the Australians; the wolf, bear, beaver, turtle, deer, snipe, heron, hawk, crane, duck, loon, turkey, musk-rat, sable, pike, catfish, sturgeon, carp, buffalo, elk, reindeer, eagle, hare, rabbit, snake, reed, grass, sand, water, rock, tobacco-plant, tortoise, red maize, the wind, tiger, bird, root, birch-rind, thickwood, sheep, brushwood, moose-deer, cat, trout, leaves, crow, sun, and snow, among the American Indians.[1]

The tabulation of the totem-objects begins with the two type-cases which we have just dealt with, and we have thus

(1) The seal. (2) The wolf.

[1] McLennan, in *Fortnightly Review*, xii, 410, 413.

(*a*) *Descent from Totem.*

This, perhaps, is the most difficult, as it is the most important, section of totem-beliefs. It is easy to understand that it should have given way before the march of Christianity, but this does not prevent us discovering relics of it. Thus we have an example in Conaire, an Irish chieftain, who is said to have been the son of a bird. That this is a true totemistic descent is proved by the addition to the legend of the food tabu, from which we learn that, before his death, Conaire's father (the bird) told the woman, his mother, that the child must never eat the flesh of fowls.[1]

The ancient name of Long Island was Innis Cat, the island of the cat or catey, and this is still traced among the people, who in common with the Cat Taobh, Cat Side, in Sutherlandshire, the Cat Nis of Caithness, and the clan Chattan, are called the descendants of the cat or catey, and have a cat for their crest.[2]

In the case of the wolves of Ossory, the local survival of a clan-totem, it has been pointed out that the belief of totem-descent from an animal passed into the belief of a change from human into animal forms, and Mr. McLennan has dealt with this as a phase of totemistic beliefs.[3] Among the superstitions of Clunie, in Perthshire, which are recorded as dying out in 1793, it is mentioned that cats, hares, and magpies were believed to be able to transform themselves into human shape.[4]

Analogous to this are the beliefs of human beings being able to turn themselves into animals. The well-known superstition of witches taking the shape of hares, cats, etc., is an example, the significance of which I must point out later on. In the Isle of Man, the annual custom of hunting the wren is accounted for by a legend which is closely connected with this phase of belief. In former times, it is said a fairy of uncommon beauty exerted such undue influence over the male population, that she at various times seduced numbers to follow her footsteps, till by degrees she led them to the sea, where they perished. A certain knight laid a plot for her destruction, which she only escaped by taking the form of a wren, but though she escaped in this way, a spell was cast upon her, by which every New Year's Day she must assume the same form of a wren, and ultimately perish by a human hand.[5]

[1] Lang's *Custom and Myth*, 265.
[2] *Report of the Crofter Commission*, 1884, p. 451.
[3] *Fortnightly Review*, xii, 424.
[4] *Statistical Account of Scotland*, ix, 253.
[5] Bullock's *Hist. of the Isle of Man*, 1816, p. 371.

This legend leads up to those beliefs wherein the souls of dying human beings take the shape of birds or animals. Butterflies, in the parish of Ballymoyer, Ireland, are said to be the souls of your grandfather.[1] In Yorkshire the country people call night-flying white moths, "souls".[2] Mr. Kelly, in his *Curiosities of Indo-European Folk-lore*, relates a curious story which he heard from a Londoner, by which it appears that a sparrow was believed to be the soul of a deceased person.[3] In Nidderdale the country people say that the Nightjar embody the souls of unbaptised infants.[4] In county Mayo it is believed that the souls of virgins remarkable for the purity of their lives were after death enshrined in the form of swans.[5] In Cornwall the fisherfolk believe that they can sometimes see their drowning comrades take the form of animals,[6] which is remarkable from the fact that it seems an entirely independent belief, and not due to the watery grave which awaited the victims. In the same county it is believed that King Arthur is still living in the form of a raven, changed into that shape by magic, and that some day he will resume his kingly form again.[7] An Irish saint-legend relating to St. Brendan is distinctly totemistic in origin. The saint had some oxen grazing in a field which belonged to a chieftain named Dobharchu, *i.e.*, an otter, who killed the saint's oxen. Thereupon St. Brendan prayed that the chief might be transformed into a real otter, after his name. Afterwards the chief went to take a drink in the lake, when he fell in, and was immediately transformed into an otter. Dobharchu's son afterwards came fishing in the lake, but was cautioned against this practice by his father.[8] The descendants of Dobharchu are still called by the otter name thus gained by the eponymous chief, and they lived near Ennis, in Thomond.[9]

As a far-off echo of the once-existing belief of the actual relationship of man to animals, as exemplified in totemism, this group of superstitious fancy seems to be very perfect. Even if we admit that the identification of the soul with the flying moth is a poetical

[1] Mason's *Stat. Acc. of Ireland*, ii, 83; [Hall's *Ireland*, i, 394]; *Notes and Queries*, 1877, p. 284.

[2] *Choice Notes: Folk-Lore*, 61.

[3] Kelly, *loc. cit.*, 104, 105.

[4] Swainson's *Folk-Lore of Birds*, 98.

[5] *Ibid.*, 152. Grimm, *Teutonic Mythology*, ii, 828, records a most significant Polish belief that the firstborn daughters of the house of Pileck change into doves if they die unmarried, and into owls if married.

[6] *Folk-Lore Journal*, v, 189.

[7] *Notes and Queries*, 1st Ser., viii, 618.

[8] Is this a food tabu?

[9] Gomme's *Gent. Mag. Lib., Traditions*, 31.

fancy, it appears to me that we must seek for the origin of the poetry in the sanctions of undying traditional beliefs, a view which has the support of Grimm,[1] and which is further supported, as we shall see later on. It remains to tabulate these collected instances of the belief of a descent from the animal world, and we find as our second list of totem-objects the following, namely:

(3) Fowl.
(4) Cat.
(5) Hare.
(6) Magpie.
(7) Butterfly and moth.[2]
(8) Sparrow.
(9) Nightjar.
(10) Swan.[3]
(11) Wren.
(12) Raven.
(13) Otter.

(*b*) *Restrictions against injuring the Totem.*

Mr. Frazer says that if the totem is an animal, its kindred will not (i) kill it; in some cases will not touch it or even (ii) look at it; (iii) will not speak of it by its proper name, but use descriptive epithets instead; if the totem is a plant, its kindred will not (iv) gather it under certain circumstances, and at a particular period of the year, and (v) will not use the wood for fire. These four totem restrictions are found surviving in folk-lore, and I will give examples of each.

(i) At Baschurch, in Shropshire, it is unlucky to kill a bat.[4] In the west of Ireland it is unlucky to kill a magpie,[5] also in north-east Scotland.[6] In South Northamptonshire "the robin is considered a sacred bird; to kill one is little less than sacrilege."[7] The same superstition obtains in the West of Scotland, where to kill or hurt it is a sin.[8] In Lancashire it must not be killed.[9] In the west of Scotland it is unlucky to kill the dark brown or spotted butterfly.[10] In north-east Scotland it was unlucky to shoot a cat, and it was believed that if anyone did so, he would within a short time meet with a disaster of some kind.[11] In Hampshire it is un-

[1] *Teutonic Mythology* (Eng. Trans.), ii, 826.

[2] On the butterfly as a totem, see Frazer, *loc. cit.*, 13; Turner's *Samoa*, 76.

[3] On the swan as a totem, see McLennan, *Fortnightly Review*, xii, 580-582; Frazer, *loc cit.*, 6; also see Gomme's *Gent. Mag. Lib.*, *Traditions*, 41, for a singular tradition of Pison in Normandy.

[4] Burne's *Shropshire Folk-Lore*, 214.

[5] *Folk-lore Record*, iv, 107; *Folk-Lore Journal*, ii, 258.

[6] Gregor, *Folk-lore*, 138.

[7] *Choice Notes, Folk-lore*, 14.

[8] Napier, *Folk-lore*, 111.

[9] Harland and Wilkinson, p. 142.

[10] Napier, *Folk-lore*, 116.

[11] Gregor, *Folk-lore*, 123. The whole collection of cat-lore recorded by Mr. Gregor is exceedingly curious, and if taken in connection with the known

lucky to kill a cuckoo or a swift.[1] In Connemara the cuckoo is a sacred bird, and it is unlucky to kill it.[2] In Lancashire it is believed that the life of a dog is bound up with that of its owner; when either dies, the other cannot live.[3] In Sussex, East and North Ridings of Yorkshire, and Scotland, it is unlucky to injure in any way the swallow, the penalty being death in some cases.[4] In one part of Wales hares are called "St. Monacella's lambs", and it is said that up to a very recent time no one in the district would kill one; and it is noted by Pennant that "when a hare was pursued by dogs, it was believed that if anyone cried 'God and St. Monacella be with thee,' it was sure to escape."[5]

(ii) Of instances of the prohibition to look at the totem we have a remarkable example from the fisher-folk of Ireland. The Chaddagh fishermen in Galway would not go out to fish if they saw a fox; their rivals of a neighbouring village, not believing in the fox, do all they can to introduce a fox into the Chaddagh village.[6] These people are peculiar in many respects, and are distinctively clannish. They retain their old clan-dress—blue cloaks and red petticoats—which distinguishes them from the rest of the county of Galway, and it may be conjectured that the present-day custom of naming from the names of fish—thus, Jack the hake, Bill the cod, Joe the eel, Pat the trout, Mat the turbot, etc.[7]—may be a remnant of the mental attitude of the folk towards totemism. In the Midland counties and Yorkshire it is bad luck to meet a white horse unless you spit at it.[8]

(iii) For the prohibition of naming the totem-object we must turn to Scotland. In north-east Scotland the word hare is not pronounced at sea.[9] In several villages, Mr. Gregor notes, the men

existence of the cat clan, *e.g.*, the clan Chattan, it seems perfectly intelligible, as the superstitions surviving after the cat clan had ceased to be considered or to consider themselves as identified with their totem.

[1] *Folk-lore Journal*, i, 394. [2] *Ibid.*, ii, 258.

[3] Harland and Wilkinson's *Lancashire Folk-lore*, 142.

[4] Swainson's *Folk-lore of Birds*, 53.

[5] Elton's *Origins of English History*, 297; Sikes' *British Goblins*, 162.

[6] *Folk-lore Record*, iv, 98. The *Ulster Journ. Arch.*, ii, 164, mentions the "hare" as being unpropitious.

[7] *Ulster Journ. Archæology*, ii, 161, 162. It is pointed out on p. 166 of this suggestive account of the Chaddagh fishermen, that the growth of their stringent clannishness is due to their being organised into a craft—the whole village being fisherfolk; and it is scarcely necessary to suggest how closely this agrees with the Hindu caste. For the archaic origin of such trade villages as Chaddagh, see Hearn's *Aryan Household*, 241.

[8] Burne's *Shropshire Folk-lore*, 208; Henderson's *Folk-lore*, 116.

[9] Gregor, *Folk-lore*, 129.

would not pronounce the word swine when they were at sea[1]; also the word salmon was never pronounced; if there was any occasion to speak of it, a circumlocution was used, and it was often named after the tax-man of the fishings nearest the village whose inhabitants shunned pronouncing the name of the fish. Thus it would be called "so-and-so's fish". Sometimes it was called "the beast". In some of the villages along the north-east of Scotland it went by the name of "the Spey codlin".[2] In another passage Mr. Gregor puts the matter still more significantly for the point of view we are studying. He says: "When at sea the words 'swine', 'salmon', 'trout', 'dog', and certain family-names were never pronounced by the inhabitants of some of the villages; each village having an aversion to one or more of the words."[3] And in another passage he tells us the real name of the green crab was never pronounced, especially at the time of putting it on the hook as bait.[4]

(iv) On plants as totems there is much of interest in English folk-lore; but I will first turn to a remark of Sir Alfred Lyall in his interesting study of the religion of the Indian province of Berar. He says that "there are several thickets and clumps of trees in Berar from which no stick is ever cut, nor even the dead wood picked up, though firewood is scarce and timber valuable"; and also that "in Berar different families are said to pay exclusive honour to certain kinds of trees". He goes on to compare with these certain well-known tree-superstitions in England, and particularly to note that "the maypole and the mistletoe are supposed to be relics of early Keltic tree-worship". "But in England", he says, "the pedigree of these customs is dim, dubious, and disputable; the Church has for ages been denouncing and stamping out the ancient indigenous superstitions, whereas in India the aboriginal autocthonic ideas of the country-folk have been subjected to no persecution by dominant faiths."[5] I will not stop to insist upon the evident totemistic origin of the Berar family-worship of particular trees,[6] but it is certainly of some importance to note that, though technically Sir Alfred Lyall's observation is undoubtedly true, there are some remnants of the old cult still left. Thus Mr. Friend notes, though without stating his authority, that until quite

[1] Gregor, *Folk-lore*, 129.
[2] *Ibid.*, 146; *Antiquary*, xvi.
[3] *Ibid.*, 199.
[4] *Ibid.*, 148.
[5] Lyall's *Asiatic Studies*, p. 12.
[6] On the connection between belief in the descent from a tree and the objection to injure trees, see Keary, *Outlines of Primitive Belief*, 65, and cf. Dormer, *Origin of Primitive Superstitions*, 288-289.

recently in England and Scotland people refused to cut down the elder and some other trees, fearing lest they should offend the tree-mother, but that if they were forced to put in the axe, they first sought forgiveness of the elf, or tree-spirit.[1] We meet with this apology for injury in savage totemism, and it is difficult not to connect such a custom with the same original. Other phases are to be met with in Scottish or Irish superstition. At Ardclinis, in county Antrim, there are strong prejudices against removing old thorn-trees, and one man "declared solemnly that he has seen some hundreds of the 'wee-folk' dancing round these trees, who told him he should suffer for meddling with them."[2] Strip this of its essentially local surroundings, as in folk-lore we are bound to do, and it forms an exact counterpart of the Berar family-custom. We may also take a passage from Aubrey, which places the protection of trees upon a purely totemistic basis. Noting that "in the parish of Ockley some graves have rose-trees planted at the head and feet", he goes on to note the opinion of a Mrs. Smyth, that "they planted a tree or a flower on the grave of their friend, and they thought the soule of the party deceased went into the tree or plant."[3] About a century ago there stood a row of trees, "all of equall size thick, planted for about the length of a butt", near the chapel of St. Ninian, in the parish of Beely, then "looked upon by the superstitious Papists as sacred trees, from which they reckon it sacrilege to take so much as a branch or any of the fruit." The same veneration was entertained in the Isle of Skye, where, about two hundred years ago, a sanctified lake is described as being surrounded by a fair wood, which none presumed to cut, and those who ventured to infringe this superstitious protection, either sickened at the moment, or were visited afterwards by some signal inconvenience, even if sundering the smallest branch.[4] A quick-thorn in the parish of Monedie was held in such veneration that people abstained from lopping any portion of it, and affirmed with awe that they who ventured to do so were punished for their sacrilege.[5] A

[1] Friend's *Flowers and Flower Lore*, i, 39. Mr. Friend quotes a rhyming formula which is repeated in Lower Saxony as a propitiation to the tree-spirit when the tree is cut down.

[2] Mason's *Statistical Survey of Ireland*, iii, p. 27.

[3] Aubrey's *Remaines of Gentilisme*, 155; Mr. Keary notes the connection which this belief has with the older belief of descent from trees; see *Outlines of Primitive Belief*, 66-67.

[4] MSS. quoted in Dalyell's *Darker Superstitions*, 400.

[5] Dalyell, *loc. cit.*, 402.

single pine-tree existed at Monzie in Perthshire, and it was believed that if any person cut a branch from it he died.[1]

In numerous places in Ireland, says Mr. Kinahan, the misfortunes of a family are traced to the cutting down of trees.[2] In Scotland this idea also finds a place. A branch falling from an oak, the Edgewell tree, standing near Dalhousie Castle, portended mortality to the family.[3]

A quotation from Carew's *History of Cornwall* also gives us an example of this phase of belief: "In Probus parish, in the late park of Lanhadron, there groweth an oak bearing his leaves speckled with white, as doth another called Painters oak in the hundred of East; but whether the former partake any supernatural property to foretoken the owner's soon-ensuing death when his leaves are all of one colour (as I have heard some report) let those affirm who better know it; certain it is that divers ancient families in England are admonished by such predictions."[4]

A comparison of this group of totem-beliefs with the first group shows us, first, a recurrence of the following totem-objects already noted:

(4) Cat.
(5) Hare.
(6) Magpie.
(7) Butterfly.

And secondly, the introduction of the following fresh totem-objects for the first time in this second group:

(11) Bat.
(12) Robin.
(13) Cuckoo.
(14) Dog.[5]
(15) Swallow.
(16) Fox.
(17) Horse.[6]
(18) Swine.[7]
(19) Salmon.
(20) Trees.[8]

(*c*) *Restrictions against using the Totem for Food.*

The well-known passage in Cæsar (lib. v, cap. xii), from which we learn that the Britons were forbidden to eat the hare, the cock, or the goose, is the most direct early authority upon restrictions against certain kinds of foods. Mr. Elton, with this passage in his mind, notices that "there were certain restrictions among the

[1] *Statistical Account of Scotland*, xv, 255.
[2] *Folk-lore Record*, v, 169; cf. Gomme's *Gent. Mag. Library, Traditions*, 24.
[3] Dalyell, *loc. cit.*, 504. [4] Carew's *History of Cornwall*, 327.
[5] On the dog as a totem, see McLennan, *Fortnightly Review*, xii, 578-580; Frazer, *loc. cit.*, 6.
[6] For the horse, see McLennan, *loc. cit.*, 570-574.
[7] For the pig as a totem, see Frazer, *loc. cit.*, 6.
[8] See Frazer, *loc. cit.*, 6; Keary, *Outlines of Primitive Belief*, 63.

Britons and ancient Irish, by which particular nations or tribes were forbidden to kill or eat certain kinds of animals" ; and goes on to suggest that "it seems reasonable to connect the rule of abstaining from certain kinds of food with the superstitious belief that the tribes were descended from the animals from which their names and crests or badges were derived."[1]

I have already cited an instance where an Irish chief, descended from a fowl, was interdicted from eating its flesh. Of Cuculain, another celebrated Irish chieftain, whose name means the hound of Culain, it is said that he might not eat of the flesh of the dog, and he came by his ruin after transgressing this totemistic tabu.[2]

Mr. Frazer points out (19) that even among existing totem-tribes the respect for the totem has lessened or disappeared, and among the results of this he notes instances where, if anyone kills his totem, he apologises to the animal. Under such an interpretation as this, we may surely classify a "memorandum" made by Bishop White-Kennett about the hare, the first of the British totems mentioned by Cæsar : "When one keepes a hare alive and feedeth him till he have occasion to eat him, if he telles before he kills him that he will doe so, the hare will thereupon be found dead, having killed himself."[3]

Mr. Elton has noted both the classical and modern accounts of certain districts in Scotland and Ireland where fish, though abundant, is tabooed as food, and he quotes with approval a modern suggestion that this abstinence was a religious observance.[4] I will proceed to notice other food taboos.

At Great Crosby, in Lancashire, there is held an annual festival which is called the "Goose Fair", and although it is accompanied by great feasting, the singular fact remains that the goose itself, in whose honour the feast seems to have been held, is considered too sacred to eat, and is never touched by the villagers.[5]

Early in the seventeenth century there was a deep-rooted aversion against eating swine in Scotland.[6] A prejudice also existed against white cows in Scotland, and Dalyell ventures upon the acute supposition that this was on account of the unlawfulness of

[1] *Origins of English History*, 297.

[2] *Proc. Roy. Irish Acad.*, x, 436 ; Lang's *Custom and Myth*, 265 ; Elton's *Origins of English History*, 299-300.

[3] Aubrey's *Remaines of Gentilisme*, 102.

[4] *Origins of English History*, 170.

[5] *Notes and Queries*, 3rd Ser., iii, 158 ; iv, 82 ; Dyer's *Popular Customs*, 384.

[6] Dalyell's *Darker Superstitions of Scotland*, 425.

consuming the product of a consecrated animal.[1] In the south-western parts of England the peasant will not eat hares, rabbits, wild-fowl, or poultry, and when asked whence this dislike proceeds, he asserts that he derived the notion from his father[2]—just the traditional sanction which is so essential to folk-lore.

The tabulation under this group gives us, first, the recurrence of the following totem objects:

(3) Fowl [*i.e.*, cock].
(5) Hare.
(14) Dog.
(18) Swine.
(19) Fish.

and the introduction of the following new totems for the first time under the food-taboo:

(21) Goose.[3]
(22) Cow.[4]

I must here interpose a remark with reference to these last two sections of evidence. Apart from the significance of the superstitions as they have been recorded in their bare condition among the peasantry, there is the additional fact to note that the superstitions against killing certain animals or birds, or against looking at them or naming them, etc., is not universal. They obtain in one place and not in another. If they were simply the reflection of a universal practice not to kill, injure, or eat a certain animal, such a practice might originate in some attribute of the animal itself which characteristically would produce or tend to produce superstition. But the spread of this class of superstition in certain districts and not in others, is indicative of an ancient origin, and it is exactly what might be expected to have been produced from totem-clans. Unfortunately, neither the negative evidence of superstitious beliefs nor the local distribution of superstitious beliefs has ever been considered worthy of attention. But some little evidence is incidentally forthcoming, and I would submit that this may be taken as indicative of what might be obtained more fully by further research into this neglected aspect of folk-lore. I drew Miss Burne's attention to this subject, and she has noted some particulars in her valuable *Shropshire Folk-lore*. Thus, of the super-

[1] Dalyell's *Darker Superstitions of Scotland*, 431. It should be noted that Dalyell wrote before the age of scientific folk-lore, and therefore his observations are founded more upon conjectures derived from the practices and beliefs themselves than from any theory as to origins.

[2] Gomme's *Gentleman's Magazine Library*, *Pop. Sup.*, 216.

[3] For the goose as a totem, see Frazer, *loc. cit.*, 6.

[4] For the bull [cow, ox] as a totem, see McLennan, *Fortnightly Review*, xii, 574-575; Frazer, *loc. cit.*, 9.

stitions against killing or meeting certain animals, we have noted those connected with the bat at Baschurch, and the white horse in the Midland counties. At Newport, Pulverbatch, Church Stretton, and Worthen, so far from being unlucky, it is considered lucky to kill the bat[1]; in North Shropshire it is lucky to meet the white horse.[2] Now, it is singular that this division corresponds with the boundary line of races which Miss Burne has so admirably depicted on her map. Again, we have noted the unluck attending any injury done to a swallow, but the same bird is viewed with dislike in Ireland, in Caithness, and in Norfolk;[3] and as to the butterfly, which we have seen is protected in Scotland, in Cornwall "they always chase and try to kill the first butterfly of the season, and should they succeed, they will overcome their enemies".[4] If we compare the statement of Cæsar, that after a battle the Gauls sacrificed "whatever captured animals survived the conflict",[5] with this last-mentioned rather remarkable reason for the practice of killing the butterfly, and with the Chaddagh fisher-custom of forcing the fox upon the villages who considered it unlucky to meet this animal, it seems to me we have examples of what might be called the warfare of totemism. Among savages it is a great thing to capture the totem-gods of enemies, and to kill them before a battle. The corresponding survival of this state of primitive totem-beliefs in modern folk-lore would be fairly represented by the local distributions which I have pointed out. With reference to the goose, a known food-taboo amongst the Britons, and the hare and hen, it is most significant that modern folk-lore still represents a survival of the ancient state of belief with regard to these animals. But Colonel Forbes Leslie has collected several examples of the sacrifice of these animals among the superstitious practices of modern ages[6] which we can reconcile with the older practice, either by the reaction which must have resulted from the forcible introduction of Christianity, whereby former totem-gods were sacrificed to the new supreme God,[7] or by the practice of sacri-

[1] Burne's *Shropshire Folk-lore*, 214.
[2] *Ibid.*, 208.
[3] Swainson's *Folk-lore of Birds*, 54.
[4] *Folk-lore Journal*, v, 214.
[5] *De Bello Gallico*, vi, 17.
[6] *Early Races of Scotland*, i, 86-90.
[7] A parallel to this suggested transition from totem-worship to totem-sacrifice is supplied by the Karen hill tribes of India, of whom it is reported, that there are "different rites hereditary in different families of the same, or of different, tribes" as to the offerings to departed ancestors. "One set offer only rice and vegetables, another offers fowls, another hogs, another oxen or buffalo," and so on, as sacrifices to their ancestors. *Journ. As. Soc. Bengal*, xxxiv (2), 205.

ficing or killing the totem-gods of enemies. Both these sections however, afford evidence of that intermixture of totem-objects which is to be expected from the known facts of totem-beliefs and customs, and, indeed, Mr. McLennan has laid it down that "we might expect that while here and there perhaps a tribe might appear with a single animal god, as a general rule tribes and nations should have as many animal and vegetable gods as there were distinct stocks in the population we should not expect to find the same animal dominant in all quarters, or worshipped even everywhere within the same nation."[1]

(*d*) *The Petting and Preservation of Totems.*

Mr. Frazer illustrates the customs of rearing and petting the totem-animals or plants from the example of the Australian snake-clan, who catch snakes and rear them as pets; the Samoan pigeon-clan, who carefully keep and feed pigeons; the Javanese dog-clan, with whom each family rears one of these animals, and so on.

In noting the examples of this practice in modern folk-lore, of course we must steer clear of the ordinary domestic animals, although from the peculiar sanctity of the pancake it is possible we may connect with this phase of totem-practice the custom at Ollerton in Northamptonshire, where the first piece of the first pancake on Shrove Tuesday is given to the cock.[2] But we may pass from this to more certain parallels of primitive totemism. The raven was a sacred bird of the Druids, and O'Curry has preserved from an early MS. source that it was domesticated for the express purpose of the auguries obtained from its croaking.[3] In parts of Pembrokeshire, on Twelfth Day, a wren is secured in a small house made of wood, with doors and windows. Pieces of ribbon of various colours are fixed to the ridge of the roof outside. This wren-house is then carried round the village, and visits are made to the principal houses, their arrival being announced by the *Song of the Wren*, as follows:

> "Joy, health, love, and peace
> Be to you in this place;
> By your leave we will sing
> Concerning our king;

[1] *Fortnightly Review*, xii, 562.

[2] *Folk-lore Record*, ii, 213. It is also worth noting that it was a general practice to "throw at cocks" on Shrove Tuesday instead of, as at Ollerton, giving them food of a special nature.

[3] O'Curry's *Manners and Customs of Ancient Irish*, ii, 224.

Our king is well drest
In silks of the best;
With his ribbons so rare
No king can compare;
In his coach he doth ride
With a great deal of pride,
And with four footmen
To wait upon him;
We were four at watch,
And all night of a match,
And with powder and ball
We fired at his hall.
We have travelled many miles
Over hedges and stiles
To find you this king
Which we now to you bring.
Now Christmas is past,
Twelfth Day is the last,
Th' old year bids adieu,
Great joy to the New."[1]

It is clear at all events from the song that the ceremony of electing the wren as king has altered as time has progressed, and we can, I think, restore this custom to its place as a survival from a totem-practice. In Ireland, on St. Stephen's Day, the practice is to carry the bird about by the leg in the centre of two hoops crossing each other at right angles, and a procession is made of men, women, and children singing an Irish catch, importing him to be the king of all birds.[2] These modern customs must, however, be considered side by side with what O'Curry has preserved from an early MS. source that the chirping of wrens was used as an augury of the Druid cult, and that the bird was domesticated for the express purpose of the augury.[3] These facts about the wren make up altogether tolerably certain evidence of its connection with primitive totemism. Turning to other objects we have first the fact that the common white butterfly was a favourite in the West of Scotland, and to catch one and preserve it alive, feeding it with sugar, was considered lucky,[4] a folk-lore substitute for an

[1] Swainson's *Folk-lore of British Birds*, 36-43; *Notes and Queries*, 3rd Ser., v, 109; cf. Wirt Sykes' *British Goblins*, 258. The caging of sacred birds —the eagle and the crow—is a custom of the Ainos. *Journ. Anthrop. Inst.*, iii, 29.

[2] [Vallancey, *De Reb. Hib.*, iv, 13.]

[3] O'Curry's *Manners and Customs of Ancient Irish*, ii, 224.

[4] Napier's *Folk-lore*, 115.

older cult which cannot be misunderstood. There is strong evidence from the old trials for witchcraft that toads were in some places baptised for magical purposes, kept, fed, and decorated with ribands.[1] But perhaps the best example of this section of totem-belief and practice comes from Scotland. In a well near the church of Kilmore in Lorn, during the course of the seventeenth century, there were kept some mystical or sanctified fish. These are described as having been two, black, never augmenting in size or number, nor exhibiting any alteration of colour, according to the testimony of the most aged persons. The inhabitants are said to have called the "said fishes Easgseant, that is to say, *holie fishes*".[2] It is important to note that the conception of these holy fishes never changing, is distinctly of primitive origin, just as we have it in tree-worship in India, where the facts of nature will not alter the natives' belief that sacred trees neither die nor grow.[3]

The tabulation shows the recurrence in this section of the following totems:

(3) Fowl [*i.e.*, cock].
(7) Butterfly.
(19) Salmon [*i.e.*, fish].

And the introduction of the following new totems:

(23) Raven.[4]
(24) Wren.
(25) Toads.

(*e*) *The Mourning for and Burying of Totems.*

The dead totem, says Mr. Frazer, is mourned for and buried like a dead clansman, and he supplies examples from Samoa, East Africa, Arabia, California, and also from two Greek centres, namely, Athens and Seriphos, an island in the Ægean.

This seems to be the origin of the curious custom once obtaining at Biddenham, on the 22nd September, when a little procession of villagers carried a white rabbit decorated with scarlet ribbons through the village, singing a hymn in honour of St. Agatha. All the young unmarried women who chanced to meet the procession extended the first two fingers of the left hand pointing towards the rabbit, at the same time repeating the following doggerel:

[1] Dalyell's *Darker Superstitions of Scotland*, 407.
[2] Dalyell, *loc. cit.*, 412.
[3] *See* Fergusson's *Tree and Serpent Worship*, 74.
[4] On the raven as a totem, *see* Frazer, *loc. cit.*, 5.

"Gustin Gustin lacks a bier,
Maidens, maidens, bury him here."[1]

At Burford, in Oxfordshire, they make a dragon yearly and carry it up and down the town in great jollity on Midsummer Eve.[2] When a wren was killed on Christmas Day, in the Isle of Man, it was laid on a bier with great solemnity, carried to the parish church and buried, after singing dirges, called its knell, over it in the Manx language. This being concluded, Christmas commenced.[3]

The tabulation of this section repeats the following totems:

(5) Hare [*i.e.*, rabbit]. (24) Wren.

and introduces us to

(26) Dragon.

(*f*) *Penalties for Non-respect of Totem.*

One of the special instances mentioned by Mr. Frazer (16) is that of the Bakalai tribe, who think that if a man were to eat his totem, the women of his clan would miscarry and give birth to animals of the totem kind. I have not been able to identify any direct parallel to this totem belief, unless it be in the prevalent idea in North Ireland and North-east Scotland, that pregnant women, if frightened by a hare, will have a child with a hare lip.[4] In our tabulation system this repeats the following totem:

(5) Hare.

(*g*) *Assistance by the Totem to his Kin.*

Mr. Frazer shows that the savage "totem gives his clansman important information by means of omens",[5] and among the examples he quotes is one from Samoa, with whom, "if an owl flew before the owl clan as they marched to war, it was a signal to go on; but if it flew across their path or backwards, it was a sign to retreat; some kept a tame owl on purpose to give omens

[1] *Folk-lore Record*, i, 243. A considerable correspondence upon this custom has been printed in the *Standard* newspaper, from April 17th to May 2nd, the vicar of Biddenham endeavouring to prove that such a custom never existed. It has, however, the support of one eye witness and the record of an old inhabitant, Captain Robe.

[2] Plot's *Natural History of Oxfordshire*, 349.

[3] Waldron's *Isle of Man*, 155; Dalyell's *Darker Superstitions of Scotland*, 421; Train's *History of the Isle of Man*, ii, 124-7.

[4] *Folk-lore Record*, iv, 104; Gregor, *Folk-lore*, 129.

[5] *Totemism*, p. 23.

in war." Observing that we have already fixed upon the hare as a totem-animal of the ancient British, let us compare with the Samoan custom the statement about Boadicea when she faced the Roman army. She took from her bosom a hare, which she released, and a favourable augury being deduced by the Britons from the course in which the animal started, the queen ordered her army to attack the Romans.[1] In modern folk-lore we have the curious example from South Northamptonshire that "the running of a hare along the street or mainway of a village portends fire to some house in the immediate vicinity."[2] In Scotland there is evidence of a peculiar custom of rearing a horse's head in the fields, and Dalyell very appropriately compares this with the mention in the Sagas of a northern chief who elevated a horse's head on a pole in the course of his execrations against the King and Queen of Norway, and with the Scandinavian practice of stripping it of the skin, and elevating it before an enemy, to intimidate him, conjoining verses that the army might be speedily destroyed.[3] In Connaught the white otter is never killed but with the loss of man or dog, and its skin is a preservative against danger in battle, victory always remaining with the wearer.[4]

Alcuin, writing to Charlemagne in 735, reproaches the British with paying attention to auguries drawn from the flight and cries of birds. Many of these auguries are still extant as items of popular belief. In South Northamptonshire, to see a crow flying alone is a token of bad luck.[5] In North-east Scotland it is deemed lucky in some villages and unlucky in others to see a magpie.[6] In Lancashire it is unlucky to see this bird, and when it is seen it is customary to raise the hat in salutation, sign the cross on the breast, or make the sign by crossing the thumbs and then spitting over them.[7] In Devonshire a peacock screaming forebodes death.[8] In Scotland the yellow-hammer is considered mystical, and in Orkney the presence of the lark, called "our lady's hen", was deemed auspicious.[9] The redbreast is also lucky in Scotland, the wren unlucky.[10]

Totems assist their clansmen by acting as doctors; one of the

[1] [Xiphiline, *Mon. Hist. Brit.*, lvii.]
[2] *Choice Notes*, *Folk-lore*, 16.
[3] Dalyell's *Darker Superstitions of Scotland*, 256.
[4] *Folk-lore Journal*, ii, 259.
[5] *Choice Notes*, *Folk-lore*, 14. [6] Gregor, *Folk-lore*, 137.
[7] Harland and Wilkinson's *Lancashire Folk-lore*, 144.
[8] *Folk-lore Journal*, i, 387. [9] Dalyell, *loc. cit.*, 417. [10] *Ibid.*, 421.

snake clans of Asia Minor believing that if bitten by an adder they had only to put a snake to the wound, and their totem would suck out the poison (Frazer, 22).

In Weardale, Durham, to cure worms a trout is obtained and placed alive upon the bowels of the patient.[1] At Shieldaig, in Ross-shire, an otter's bladder has been in the possession of a game-keeper for a number of years, and is used in the neighbourhood as a cure for illness.[2] In North-east Scotland, when a family had to remove from one house to another, the cat was always taken, and before a member of the family entered the new abode, the cat was thrown into it, and if a curse or disease had been left on the house, the cat became the victim, and died, thus saving the family's lives.[3]

A fox's head was nailed on the stable door in some parts of Scotland to bar the entrance of witches.[4] Hardwicke has preserved a curious Lancashire legend connected with the "Dun cow", which is of itself a distinctly totem-legend, and has its variant in India among the non-Aryan aborigines.[5] The Lancashire legend is connected with the old farm called the Old Rib in the township of Whittingham, the name of which is derived from an extraordinary rib which was taken from an old dun cow and placed over the door of the farmhouse.[6]

Amulets descending from father to son in particular families, and borrowed by people in the neighbourhood for the purposes for which they are considered useful, are certainly survivals of totemism. One of these is said to have been for a long time preserved in the family of Campbell of Glenlyon. It is rather of an ovoidal form, about 1½ inch in diameter, the outside a polished surface, and its whole interior exceedingly pellucid, pure, and free from flaws. Another amulet, much of the same description, is preserved in the

[1] *Folk-lore Record*, ii, 205. [2] *Ibid.*, iv, 183; *Folk-lore Journal*, i, 124.

[3] Gregor, *Folk-lore*, 124.

[4] Dalyell, *Darker Superstitions of Scotland*, 148. Among the Ainos of Japan, the aboriginal race, the skulls of bears are hung up opposite to each house, and the skulls of foxes are preserved inside the house. This exhibition of the skulls takes place with certain ceremonies, among which is a drink-offering presented to them on special occasions. They show an idolatrous veneration for these skulls. *Journ. Anthrop. Inst.*, iii, 124, 239. For the worship of the fox by the Ainos, see *Folk-lore Journal*, vi, 11.

[5] *Arch. Survey of India.*

[6] Hardwicke s *Lancashire Legends*, 17. These two examples are what Mr. Frazer has called split totems, *loc. cit.*, 10, 11; and it is singular that amongst the Omaha totem-taboos is that "they may not eat the meat on the lowest rib" of the buffalo.

family of Stewart of Ardvorlich. Another, the celebrated Lee Penny belonged to the Lockharts, lairds of Leyis House, in East Lothian.[1] An image of wood about two feet high, carved and painted like a woman, is kept by one of the family of the O'Herlebys (Ballyvorney, county Cork), and "when anyone is sick of the small-pox they send for it, sacrifice a sheep to it, and wrap the skin about the sick person, and the family eat the sheep. But this idol hath now much lost its reputation, because two of the O'Herlebys died lately of the small-pox."[2]

That ordinary omens of assistance should pass into acts of worship for assistance is an easily accounted for transition. Pennant, in his *Tour in Scotland*,[3] gives a curious account of a ceremony practised by herdsmen. They formed a square trench, leaving the turf in the middle. They next lighted a fire and cooked a dish composed of eggs, butter, oatmeal, and milk. They had also oatmeal cakes on which they raised nine square knobs. The ceremonies then began by spilling, as a libation, some of the dish prepared with eggs and milk. Each of the knobs on the cakes was dedicated to some particular being, the supposed protector of their flocks and herds, or to some particular animal, the real destroyer of them. Each person, turning his face to the fire, broke off a knob from his cake and flinging it over his shoulder, said, "This I give to thee, preserve thou my horses"—"This I give to thee, preserve thou my sheep", and so on. After that, they used the same ceremonies to the noxious animals, saying, "This I give to thee, O fox, spare thou my lambs"—"This I give to thee, O hooded crow"—"This to thee, O eagle", etc.

The appearance of the totem in or about the house was by some clans regarded as an omen of death; the totem had come to fetch his kinsman (Fraser, 23). At Pulverbalch, in Shropshire, it is accounted unlucky to bring a bat into the house.[4] In the north of Ireland a magpie tapping at the window is a sign of death in the house.[5] In South Northamptonshire, "before the death of a person a robin is believed to tap thrice at the window of the room in which he or she may be."[6] In Lancashire a jackdaw is always

[1] Dalyell's *Darker Superstitions*, 157. Cf. the Karen amulets, *Journ. As. Soc. Bengal*, xxxiv (2), 223.

[2] Richardson's *The Great Folly, Superstition, and Idolatry of Pilgrimages in Ireland*, 1727, p. 71.

[3] iii, pp. 110-111; Stewart's *Highlanders of Scotland*, i, 9.

[4] Burne's *Shropshire Folk-lore*, 214.

[5] *Folk-lore Record*, iv, 99.

[6] *Choice Notes, Folk-lore*, 15.

an unwelcome visitor if it alight on the window-sill of a sick-chamber. A white dove is thought to be a favourable omen ; its presence betokens recovery to the persons within.[1] In Wiltshire a sparrow tapping at the window indicates a death in the family.[2] Rooks are believed to forsake their home upon the downfall of the family, or the death of the heir, to whom the estate belongs ; and instances are quoted from Northumberland, Rutlandshire, and Cornwall[3]; and a phantom bird is supposed to appear at the death of a member of the Oxenham family.[4]

Taken altogether, this section seems to afford very conclusive evidence of survival of totem-beliefs. Tabulating them, we find this section repeats the following totems :

(4) Cat.
(5) Hare.
(6) Magpie.
(8) Sparrow.
(11) Bat.
(12) Robin.
(16) Fox.
(17) Horse.
(19) Salmon.
(22) Cow.
(24) Wren.

and introduces us to

(27) Otter.
(28) Crow.
(29) Peacock.
(30) Yellow Hammer.
(31) Lark.
(32) Dove.
(33) Jackdaw.

[1] Harland and Wilkinson, *Folk-lore*, 143.
[2] Aubrey, quoted by Swainson's *Folk-lorelof Birds*, 61.
[3] Swainson's *Folk-lore of Birds*, 87-88.
[4] Gomme's *Gentleman's Magazine Library*, *Pop. Sup.*, 211.

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(To be continued.)

RECENT ARCHÆOLOGICAL RESEARCH.

No. III.—NUMISMATICS.

Catalogue of Greek Coins in the British Museum, by R. S. Poole, B. V. Head, P. Gardner, and W. Wroth, ed. by R. S. Poole, 1873-89.
Catalogue of Oriental Coins in the British Museum, Arabic Section, by S. Lane Poole, ed. by R. S. Poole, 1875-9.
Catalogue of Oriental Coins, Persia, by R. S. Poole, 1887.
Catalogue of Indian Coins, Bactria, by P. Gardner, 1882; *Sultans of Delhi*, by S. Lane Poole, 1884; *Mahommedan States*, by S. Lane Poole, 1885.
Catalogue of Roman Medallions, by H. A. Grueber.
Medallic Illustrations of English History, by Ed. Hawkins, A. W. Franks, and H. A. Grueber, 1885.
Catalogue of English Coins, Anglo-Saxon Series, vol. i, by C. F. Keary, 1887.

IN 1887, the year of the Jubilee, the Numismatic Society of London also celebrated the Jubilee of its foundation, and the President, Mr. John Evans, gave an interesting short account of the foundation of that Society and its history. It would have been still more interesting had time permitted him to review even cursorily the history of numismatic studies in this country during the same interval. Had he done so, the result would, I think, have been to show that, after a longish period of comparative stagnation, this branch of archæology had, during the last ten or fifteen years, made advances in excess of perhaps any other department of archæology, however great that may be.

It would have been shown too, I think, that numismatics is almost the only field of archæological research in which England holds its own, or more than holds its own, against any one continental nation, not excluding Germany, the *foyer* of nearly all antiquarian studies. And yet the work done in this department is in the hands of a very few. It is by no means adequately represented by the publications of the Numismatic Society, though some among these are of considerable value. By far the largest share of it comes from the numismatic department of the British Museum, which, aided, no doubt, by a good deal of outside help, has produced in the sixteen years since 1873 twenty-seven volumes of catalogues of the coins and medals in the English coin cabinet, twelve of Greek, eight of Arabic, one of (modern) Persian, three of Indian, two volumes of English, and one of Roman. Next to this series of volumes, the most important has been the new *Numismata*

Orientalia, edited during his life-time by the late Mr. Edward Thomas, one of our most distinguished Orientalists. Many of the authors in this series were not even members of the Numismatic Society. And even in the matter of the publication of separate papers, we have to add to those which have seen the light in the pages of the *Numismatic Chronicle*, a very large number of papers on Oriental coins which have been contributed to the journals of the Asiatic Societies of England and of India. Lastly, besides all these series, the Museum publications, the *Numismata Orientalia*, and the various journals devoted more or less to numismatic pursuits, there have appeared in comparatively recent years a number of separate works of considerable size and even greater importance. Professor Gardner's *Types of Greek Coins* (Cambridge: Pitt Press) may be mentioned as one ; another, which cannot be passed over (though its value is by no means proportionate to its size), is Mr. Seth Stevenson's large *Dictionary of Roman Coins*. But by far the most noteworthy of all these is Mr. B. V. Head's *Historia Numorum* (Oxford : Clarendon Press), published in 1887, by universal consent the most important work on ancient coins which has appeared since the celebrated *Doctrina Numorum Veterum* of Eckhel.

It may be gathered, therefore, that a writer upon the recent progress of numismatic research, even if he confined his attention altogether to English publications, would have no lack of material, but rather an *embarras de richesses*. And yet it is by no means by the abundance of separate treatises alone that the advance in recent numismatic research is to be estimated, but also by the general improvements of its methods and the clearing of its vision "all along the line", as the phrase goes.

This advance has, in many cases, taken almost the form of a new departure. It would be impossible to do justice to it merely by a criticism of recent publications, one by one. At any rate, before we could do this, we should need to gain some notion of the fundamental changes in numismatic science, due to recent research. In order to make a comparison between the present and the past, we need to keep in mind the great work which, for half a century, moulded all subsequent study, at any rate in the field of ancient numismatics (and modern numismatics are in a great degree modelled upon classical numismatics), and which even now predominates over all later ones ; I need not say that I am speaking of the *Doctrina Numorum Veterum* of Eckhel. I do not think it necessary to make any specific or detailed references to the *Doctrina*.

I may assume that every reader, who is interested in numismatics at all, is acquainted at least with the main features of that book.

Until within the last fifteen years it can hardly be said that anything material had been added to Eckhel's work in ancient numismatics. As the French would say, subsequent writers had been content to embroider on the tissue of Eckhel. Even now the arrangement of almost every coin cabinet, of almost every private collection, bears witness to his lasting influence—to a degree which may fairly be a subject of regret. The National Collection of Greek coins is still arranged (all subsequent advance of numismatic science notwithstanding) in the order of Eckhel; the Museum Catalogues necessarily follow the Museum arrangement to a large extent. And lastly, the writer of the work which of all others bears the best witness to the advance of numismatic archæology since the publication of the *Doctrina*—I mean Head's *Historia Numorum*—has considered himself obliged to put his new wine into old bottles by a similar procedure.[1]

In the admirable conclusion to an admirable work, Canon Taylor's *History of the Alphabet*, the writer sums up the characteristics of modern palæography, which distinguish it from the palæography of twenty or thirty years ago. He shows how it, like all other modern sciences, has been influenced by the Darwinian doctrine of development; how, in obedience to that doctrine it has learnt to "discard the obsolete notion of arbitrary invention or creation, and to seek for self-acting causes adequate to produce the results which are detected by minute research." These remarks apply equally to the study of numismatics. Coins, taken as a whole, have a history remarkably like that of writing. And this need not surprise us, because the function of coins is not dissimilar to the function of writing. Writing is not speech, but it may fairly be described as the token of language, so coins are not value, but they are the tokens of value. Hence we find (beginning with the wider and passing on to narrower classifications) not the least important achievement of recent numismatic study is that it has settled finally the question of the origin of Greek coinage, and, as a result of that decision, the origin of the coinage of all the western half of the world. As we now know that every alphabet used in Europe and in Asia, save in the Far East, is a derivative from

[1] The influence of the by-gone school of numismatics is altogether paramount in the article "Numismatics" in the *Encyclopædia Britannica*, which, as corrected for the ninth edition, differs in no material respect from the form in which it originally appeared some five-and-twenty years ago.

the hieratic character of Egypt, so we know that all the coinages west of Nepaul are descendants, near or remote, of the small stamped ingots of impure gold (electrum) first issued by the Mermnadæ kings of Lydia at the beginning of the seventh century before Christ. This chain of inheritance, of which no link is wanting, not only gives a unity to the whole study of numismatics which was not even imagined in the days of Eckhel, or in long subsequent days; but it opens out one field of numismatic research which brings the study almost within the province of the natural sciences; and allows us to classify different orders of coins, almost as we should classify the *genera* and *species* of plants or animals, and to trace the *morphology* of the one as we trace the morphology of the other. As I have ventured to point out elsewhere,[1] there is one important fact connected with their morphology whereby coins seem to be "distinguished from almost all other implements used by mankind, and for this reason rendered specially interesting subjects for a study of their changes of form. They follow a law of heredity—as we may fairly call it—only less constant than the law of heredity in organic life. Almost all implements do in fact bow to a similar law, but in their case it is only established *ex post facto*. In the case of coins it may be laid down as a necessary principle. Thus it is a *fact* that each sword, or plough, or water-jar is shaped essentially upon the pattern of the sword, or plough, or water-jar which was used before it. But there is no absolute reason in the nature of things why some heaven-sent genius should not shape the ideal or perfect type of each. Each has a definite function to perform: find out the best material for performing that function, the best way of shaping that material, and the ideal type is made. But coins have to perform no special function in relation to natural forces. Their concern is chiefly with human character; they have to pass current as media of exchange. Their capacity for so passing current is determined, at least so far as the form of the coins is concerned, by men's familiarity with the previous issue. Each issue, therefore, *must*, by its very function, inherit something from the issue which preceded it." This quotation will be enough to indicate a new field of numismatic research, which has as yet been scarcely touched; it will be enough at the same time to illustrate the kind of unity which belongs to the study of numismatics as a whole, and which was undreamed of by Eckhel and his immediate successors. Closely connected with researches into the origin

[1] "Morphology of Coins," *Num. Chron.*, 3rd series, vol. v, p. 169.

of the coinage are the studies in metrology begun by Brandis[1] and so successfully carried on by Head,[2] which have shown us the different weight-systems in use among the various coinages of Greece. Side by side with the study of the morphology of the coins this study of metrology helps to show us the parentage and descent of the various classical coinages. For from the Greek coinages of Magna Græcia we pass on without any distinct break to the earliest silver coinage of Rome. The *æs grave* forms a class apart; not, however, a class peculiar to Rome, but obtaining generally to Central Italy. And from the *æs grave* is descended the Roman bronze coinage, which thus has a different parentage, as it has a different history, from the Roman coinage in gold and silver.

Next after this widening of our outlook, which belongs more or less to all branches of numismatics, comes another classification, springing out of the historical or morphological one, and applying specially to the Greek coinages—I mean the classification according to the stages of artistic development. This, too, is an achievement of recent numismatic study, as distinguished from the numismatics which drew all its inspiration from Eckhel. For this kind of classification was practically unknown to Eckhel. We have only to study the meagre list of coins which he publishes of some of the most important artistic series to see that he was without the power of effecting such a classification, and even if he could have made it, he would have been unable to illustrate it. In fact, for the advance of science upon this point, at any rate of *teaching* science, we have to thank the newly discovered mechanical process of reproduction, especially autotype photography, scarcely less than the more historic method of archæological research. As a sort of barometer of the advance in both these directions, it is interesting to look through the long series of catalogues of Greek coins published by the British Museum from the year 1873 down to the present date. The first volume of this series is Italy—*i.e.*, the Greek coins of Italy. The choice of such a series to begin with, a series which displays Greek art chiefly in its zenith or its decline, in which the morphology is almost inexplicable without reference to the coinage of Sicily, and through Sicily to that of Greece Proper, shows the unscientific spirit in which this work was begun. It is, in fact, in strict accordance with what a German would call the *eckhelsche tradition.* Nor does the method of

[1] *Münz- Mass- u. Gewichtswesen in Vorderasien*, 1866.
[2] *Coinage of Lydia and Persia* (*Numismata Orientalia*), 1877.

treatment adopted for this volume show any improvement upon earlier works. Carelli's *Nummi Italiae Veteris* is adopted as the foundation of the catalogue, which, so far as it concerns its contribution to numismatic science, is little more than a list of varieties not published by the above writer. We have no systematic inquiry into the origin of the types used by the various cities, no adequate classification under periods of art, and lastly, no reliable illustrations of the series ; for all illustrations are from wood-blocks drawn by hand. Before the publication of the next volume of the catalogue an improvement begins to show itself. In the interval had been published Head's *Chronological Sequence of the Coinage of Syracuse*, which, small as it is, was in its way an epoch-making work. Professor Gardner's *Sicilian Studies* applied the lessons drawn from a study of the Syracusan coinage to the whole series of Sicily, and the result is that by the time of the issue of the second volume of the Museum Catalogue (*Sicily*, 1875) the system of arrangement under artistic periods, which is the *alpha* and *omega* of Greek numismatics, had been settled upon a firm, and we may say for practical purposes a final basis. Still, however, the method of illustration by wood-blocks was used in this second volume. But this was at length abandoned, and from the appearance of the third volume of the Museum Catalogue of Greek coins onwards, the system of illustration by the purely mechanical process of autotype photography has been adhered to.

Not only were the series of coins known to the earlier numismatists too meagre to afford scope for the kind of artistic classification of which we have spoken, but some classes were altogether wanting. A notable instance of this is the splendid series of Cyzicene staters, which afford the most varied examples of types and some of the finest artistic productions to be found in the whole range of Greek numismatics. Many of these have been published by Head in papers contributed to the *Numismatic Chronicle*. But the most complete treatise on the subject is a paper recently contributed by the Rev. William Greenwell[1] to the same publication.

The studies in the two directions which I have indicated, the history and development of coinage as a whole, and the special classification of Greek coins under its periods of art, are the two special achievements of modern numismatic science. It is due to the latter that the study of coins has become the indispensable handbook or grammar of all classical archæology. But it is not to

[1] "The Staters of Cyzicus," *Num. Chron.*, 1887.

be supposed that researches upon the earlier lines—the inquiry into the meaning of individual types, and the archæological information which these contain—have been neglected. Professor Gardner's *Types of Greek Coins* (1882) covers in a large degree both fields, and may be reckoned, after the British Museum Catalogues and the *Historia Numorum*, as the most important contribution of recent years to classical numismatics.

Another work quite recently published by Professor Gardner in conjunction with Dr. Imhoof-Blumer of Winterthur, a numismatic commentary on Pausanias, is of that class of archæological study which descends unaltered from the earlier tradition. As may be imagined, it is largely concerned with the Greek Imperial Series, so much imbued with the relics of local mythology. Mr. Grenwell's paper just cited is a recent publication of the same class. One of the most interesting papers on numismatic archæology published for many years is a study just issued (1888) by M. Svoronos, *Ulysse chez les Arcadiens et la Télégonie d'Eugammon.* This is a remarkable example of the contribution which coins often make to the study of classical mythology and tradition. By the aid of certain coins of Mantinæa of an obscure type which M. Svoronos has been the first to decipher correctly, the writer is able to carry on—at any rate according to one tradition—the history of Odysseus, after the close of the Odyssey, in a sense quite different from that which has been the account preserved by the scholiasts. The tradition preserved upon the Mantinæan coins brings Odysseus, after the death of the suitors, once more a wanderer (as the prophecy of Teiresias even in Homer had shown he was to become) into Arcadia (instead of Epirus), and then to the cave of Triphonius ; emerging thence he meets with the man who, as Teiresias prophesied, was to mistake his oar for a flail ; at that spot he was to plant his oar in the ground and set up his abode. Not only is the correction of the scholiasts' account of Odysseus' wanderings interesting, but the reduplication of one of the Homeric incidents is highly suggestive ; for it is evident that the visit to Triphonius, followed by the planting of the oar, is merely a reduplication of the Homeric incident of the summoning of Teiresias. M. Svoronos considers that the tradition preserved in this manner on the coins is the tradition followed in the Telegony of Eugammon.

Perhaps no one word has done so much to hinder scientific numismatics as the use of the word *medal* as applied to ancient coins. Etymologically it may be justified. M. F. Lenormant, in

his *La Monnaie dans l'Antiquité*, has shown how the use of the word medal (médaille) arose from the Italian medaglia, originally only a demi-denier, but in later times used to denote a coin which had gone out of circulation. But we are not concerned with chronological significations. In modern days the word *medal* always implies a piece of metal struck for some particular occasion, and stamped with an arbitrary design. Its use to designate ancient coins has fostered the vice of earlier numismatic study, a tendency to look upon each coin-type as unconnected with types which preceded it, to see in it something at once arbitrary and accidental, such as are the designs of modern medals: moreover, this misreading of coin-types has gone on all-fours into the misreading of history characteristic to the same era of study, whereby wars and treaties, laws and customs, were looked upon as due to the caprice of individuals rather than to national tendencies. One cannot, therefore, be otherwise than glad to see the place of the medal in the history of numismatics still further narrowed by the withdrawal of the Roman medallion from that class. Such is the effect of a long and very important paper contributed by Dr. Kenner to the *Numismatische Zeitschrift* for 1887. This is the most important paper which has appeared upon Roman numismatics for many years. It would be impossible to follow here in detail the arguments which the learned writer brings forward to establish the proposition that the so-called Roman medallion was essentially a coin, not by any means a medal in the modern sense of the terms. There are, as he has shown, two classes of Roman medallions, each of which has its own history. In the second century the bronze medallions reach the culminating point of their development: the silver in the third, and the gold in the fourth. The bronze medallions are of genuine Italian origin; but those in the precious metals are the descendants—*morphologically*—of the large silver, and more rarely, gold pieces, coined by the successors of Alexander in the East, and introduced by them into the morphology of coins. In no case is the Roman medallion to be looked upon simply as a commemorative piece, but only as a sort of *pied fort*, a larger edition of a coin in currency.

The medal proper, therefore, the merely commemorative piece of metal, made more or less in the *shape* of a coin, but having no other connection with a currency of any kind, begins in the world's history with the celebrated Italian medals of the age of Vittore Pisano. Medals proper have really so little connection with coins that it is difficult to say why the two series should always be classed

together, and medals not rather placed alongside of bronzes or miniatures, or some other purely artistic or commemorative relic of the past.

While, however, we are dealing with the subject of medals, it may be as well to mention a series of publications which some five or six years ago concentrated public attention very much upon the fine class of Renaissance medals, Italian and French, and very much enhanced the prices of these treasures in the market. The most important of these publications are Friedländer's *Italienische Schaumünzen* (1882); Armand's *Médailleurs Italiens* (1883-1887), a series of beautifully illustrated works by M. A. Heiss, on various classes of Renaissance medallists, beginning in 1881, of which the latest, a monograph on Venetian medallists, bears date 1887; and some valuable essays by M. Nathalie Rondot,[1] on the medallists of Lyons and others. To these may be added the *Guide to the Italian Medals* exhibited in the British Museum, by the present writer, as well as a paper in the *Numismatic Chronicle*, 1879. The highly interesting series of German medallists, too, have been treated of in the *Zeitschrift für Numismatik* by Dr. A. Erman, and in the *Numismatic Chronicle* by Mr. T. Whitcombe Greene.

To return to the field of Roman numismatics, we have to note in recent years the issue of a new edition of Cohen's *Monnaies de l'Empire Romain*, M. Babelon's more scientific *Monnaies de la République Romaine* (1885-6), an interesting treatise by M. Charles Robert on the Contorniates, and finally the issue in the current year of Mr. Seth Stevenson's too long delayed *Dictionary of Roman Coins* (1889). Of this last work it is difficult to speak. Mr. Seth Stevenson died so many years ago that it was impossible that his colossal undertaking could fail to be incomplete after having fallen so much behind the march of contemporary numismatic research. And it is quite certain that though the names of two other numismatists appear upon the title-page, neither of them has performed the task of bringing this publication up to date.

From the Greek coinage proper (turning eastwards once more) we pass through what we may call the Hellenistic coinages to the field of Oriental Numismatics. In the field of Hellenistic numismatics we need not linger, though it has received valuable illustration in comparatively recent years by two volumes of the British Museum Catalogue, Prof. Gardner's *Coins of the Seleucidæ* (1878), and

[1] *Revue du Lyonnais.*

Prof. Poole's *Coins of the Lagidæ* (1883). When we have reached the Bactrian coins we are considered to have stepped outside the region of classical into that of Oriental numismatics, and in consequence the volume on the *Coinage of Bactria*, by Prof. Gardner (1886), forms, or should form, vol. i of the Indian Series of Museum publications.[1]

Through the Græco-Bactrian, the Indo-Bactrian, and Indo-Scythic coinages, we pass to the first purely Indian coinage, that of the Guptas, which covers, as is now shown, a period of about 140 years, from *circa* A.D. 340 to *circa* A.D. 480. This series, first brought under the notice of Oriental numismatists by Wilson and Prinsep, afterwards by Edward Thomas, in his additions to the *Indian Antiquities* of Prinsep, and later on made the subject of a separate treatise by Thomas, has during the last year received exhaustive, and we might almost say final, treatment at the hands of Mr. Vincent Smith, of the Bengal Civil Service (1888), in the most important paper on Indian numismatics which has appeared for some years. Mr. Smith first dealt with the gold coinage of the Guptas alone (*J.R.A.S. Bengal*, vol. liii, 1884). He has now in the year just past reviewed the whole series—gold, silver, and copper. His researches during the interval, which have included a detailed examination of the fine Bodleian collection of this series of coins, not before accessible, and the publication of the Gupta inscriptions in the *Corpus Inscriptionum Indicarum* have enabled the writer to make considerable corrections and improvements upon his earlier paper. The Gupta era is now established in the sense which I have just indicated. The coins formerly attributed to Ghatot Kacha are shown to belong to Kâcha, who is probably identical with Samudra Gupta. The first two kings of this dynasty therefore, who bore only the title of *Mahârâjâ*, struck no coins. It was after the marriage of the Guptas with the royal house of Lichchhavi, then ruling in Nepâl, and the assumption of the title *Mahârâjâdhirâja* (the exact equivalent of the βασιλεὺς βασιλέων copied from the titles of the Persian kings), that the Gupta coinage begins. The coins treated of in the new *Numismata Orientalia*, of which we have already spoken, belong in the majority of cases to the Indian class of coins. This we might expect from the proclivities of the writers. Elliot's *Coins of Southern India*, and Rhys David's

[1] In this series there is no indication of the sequence of the volumes. From a few words of preface to the volume on the *Sultans of Delhi*, we might infer that that was volume one of the series. As a matter of fact, the cataloguing of this class should have followed the catalogues of all the Hindu coins.

Coins and Measures of Ceylon, may be specially mentioned in this place. None however belong to the number of quite recent publications.

Through another Græco-Oriental series, the Parthian coinage, we pass on to a vast family of Oriental coinage. The child of the Parthian coinage is the Sassanian coinage of Persia. On neither of these series has anything important been written of recent years, and an exhaustive work on Sassanian coins is still a desideratum. From the Sassanian coinage is descended the whole vast family of Arabic coins. The catalogue of this enormous series, in so far as it is represented in the National Collection in eight volumes, has been practically completed, and forms the greatest achievement in Oriental numismatics which we have to record for the last decade. It was begun by Mr. Stanley Lane Poole in 1875, and finished by the same hand in 1883. Supplementary volumes, comprising coins acquired since the catalogue was begun, are in course of publication. To estimate the importance of this series of volumes as a whole, we must compare it with some previous work which seeks to gain as wide an outlook, and we can name none since the appearance of Frähn's *Recensio Numorum Mohammedanorum*, 1826.[1] Yet merely to mention Frähn side by side with the British Museum *Catalogue of Oriental Coins* is to show the deficiencies of the former. In individual series, no doubt the Museum catalogue has been surpassed by contemporary publications in other countries; as, for instance, the volume on the Amawees (Omeyads) and Abbasees has been far surpassed by Tiessenhausen's complete work on the same Chalifate coinages. At this moment, the first volume of M. Lavoix' *Catalogue of the Oriental Coins in the French Bibliothèque Nationale* has appeared. Arabic coins, which with rare exceptions contain no design which can be called their type, are beyond all other series valuable as historical documents, on account of the dates and the names of dynasties and places of mintage which they contain. How useful these catalogues may be to the historian is shown in the case of one volume of the series by the references to the *Catalogue of the Mongol Coins* in the preface and the foot-notes of Mr. Howorth's last volume on the *History of the Mongols*. The volume on the *Coinage of Modern Persia*, by Professor R. Stuart Poole, may be classed with the Arabic section, though, properly speaking, it forms a division apart.

Returning again to the west, we have to note that not much

[1] *Supplement*, ed. Dorn, 1855.

has appeared of late upon the Roman coinage. The subject of a treatment so exhaustive as is Mommsen's *Römisches Münzwesen* has less to offer to modern research than many other fields of numismatics. Nevertheless, it is highly desirable that a catalogue of Roman coins in the British Museum should begin to make its appearance and proceed *pari passu* with the other series. The late Count De Salis spent a small portion of his lifetime, and ruined his health, in the work of arranging the Roman coinage in an order of local issue. He unfortunately left few notes behind him to guide subsequent students along the steps which led him to the conclusions he adopted. But the distribution of the coins in the National Collection is his distribution, and if it is accepted by those responsible for the custody of these coins, the world at large ought to be made acquainted with its character. Of recent works actually published in the field of Roman numismatics, M. Babelon's *Monnaies de la République Romaine*, already referred to, is by far the most important. It is not to be looked upon as a new edition of Cohen's work upon the same lines, but it is far more scientific, and is preceded by an admirable preface.

The series which is most immediately linked on to the Roman coinage properly so called is the Byzantine. Since the publication of Sabatier's *Monnaies Byzantines*, nothing important has appeared upon this subject.

From the Roman coinage we pass through a series to which I have given the name of *Transition Coinages*[1] (imitations of Roman money made by early Teutonic invaders of the empire), to the coinage of the Middle Ages. Last among the transition currencies, or first among the mediæval, stands the Merovingian coinage. A complete work upon this subject is one of the greatest *desiderata* of mediæval numismatics. But in the meantime we have to record a series of excellent recent papers upon the subject from MM. Deloche and Prou, of the Bibliothèque Nationale.[2] The next mediæval series of the Continent is the Carlovingian, which, too long neglected, has now received adequate illustration at the hands of M. Gariel.[3] The much to be lamented death of this excellent numismatist will, it is to be feared, postpone the further treatment of this branch of numismatics. The earliest German coins, properly so called, are those struck by the emperors who

[1] *Coinages of Western Europe from Honorius to Charlemagne*, by the present writer (*Num. Chron.*).

[2] *Revue Numismatique*, 1883, *et seq.*

[3] *Monnaies royales sous la race Carlovingienne*, 1883.

followed upon the fall of the house of Heristal, the so-called Saxon and Franconian emperors. This series was taken in hand twelve or thirteen years ago by H. Dannenberg in his *Münzen der Sachs- u. Frank. Kaizerzeit* (1876), and nothing very material has been added to the results there given. The coinage of the Hohenstaufen period is very largely represented by those debased and thin coins (struck for the most part on one side only) known by numismatists as *bracteates*. This series had been made the subject of a work by M. Schlumberger, one of the most distinguished of French (Alsatian) numismatists. Of other comparatively recent works on mediæval numismatics, of which we have not time to speak in detail, may be mentioned Schlumberger's *Numismatique de l'Orient Latin* (Coins of the Crusaders), 1882 ; Gnecchi's *Monete di Milano ;* Werdnig's work on the Venetian *Oselle ;* Hoffman's *Monnaies Royales de France ;* and last, but by no means least, a work by Count Tolstoi (*not* Leo Tolstoi) on the earliest Russian coinage. This last is a series of debased imitations of Byzantine money, probably of the twelfth century, which have only recently come to light. The exact era to which this coinage is to be assigned is still a matter of dispute. Heiss's two works on Spanish coins, *Monnaies des Rois Wisigoths* and the *Monedas Hispano-Christianas*, are publications of some years' standing, but may be mentioned here.

We come finally to the coinage of this country, which runs side by side with that of continental Europe. The curious series of pieces, for the most part uninscribed, and when inscribed very often containing Runic legends commonly known as *sceattas*, are the earliest English coins struck in this country, and owe their existence to an imitation of the contemporary Merovingian currency. This at any rate is what I believe that I have demonstrated. The *sceat* series is followed by the *penny* series, imitated from the continental coins of the Carlovingian epoch. The earliest issues in both these series are described in the first volume of the *Catalogue of English Coins in the British Museum* (1887) by the present writer. Another work upon early English coins which has recently appeared is the new edition of Hildebrand's *Anglo-sachsiska Mynt.* A new edition of Hawkins's *English Silver Coins* was issued by Mr. R. Lloyd Kenyon in 1876, and a second edition of this work has since appeared. Parallel with this is the work on *English Gold Coins* by Mr. Kenyon, founded in a great degree on notes left by Mr. Hawkins. The second Museum publication on the subject of English numismatics is the magnificent *Medallic*

Illustrations of British History, begun by Hawkins and completed by A. W. Franks, F.R.S., and H. A. Grueber, F.S.A. The coinage of Scotland has of recent years received more attention than that of England. Two separate magnificent works on *The Coinage of Scotland*, by Mr. Cochran-Patrick and Mr. Edward Burns, have appeared within the last fifteen years, and together leave little room for further work on so grand a scale. Into the points in dispute between these two writers we have not time to enter here. The medallic history of Scotland has been treated by no means in so complete a manner as has the coinage by Mr. Cochran-Patrick.

A work upon the coinage of Ireland similar to those of Cochran-Patrick or Burns are among the desiderata of numismatics. Lindsay's *Coinage of Ireland*, 1839, is now quite out of date, and the various papers of Irish numismatists, such as those by Dr. Aquilla Smith, are at once so unsystematic as to be difficult of use, and so scattered throughout the pages of various journals as to be difficult of attainment.

In another department which excites the interest and activity of many, the department of English, etc., Tokens, we are promised an entirely new edition of Boyne's *Seventeenth Century Tokens*. Several handbooks to English coins have also made their appearance in comparatively recent years. One by a numismatist whose death we have to regret, Col. Stewart Thorburn, may be mentioned here.

A constant succession of papers upon the mediæval coinages of the Continent and upon the coinage of this country appears in the pages of the *Numismatische Zeitschrift* (Vienna), the *Zeitschrift für Numismatik* (Berlin), the *Revue de Numismatique* (Paris), the *Revue de Numismatique Belge*, the *Rivista Italiana*, etc., and, finally, the English *Numismatic Chronicle*. Some have already been referred to; many others are of very considerable importance, but it would be impossible to make a further selection from them here.

C. F. KEARY.

THE LEGEND OF THE BUDDHA'S ALMS DISH AND THE LEGEND OF THE HOLY GRAIL.

SHORTLY after the publication last year of my *Studies on the Legend of the Holy Grail* (quoted throughout this article as *Studies*) my attention was called by Mr. Cecil Bendall to a Buddhist story which presented analogies to the Grail Legend. The reference was to the Rev. Dr. Samuel Beal's Catalogue of the Japanese edition of the Buddhist *Tripitaka*, and it will be best to transcribe the passage in full, from pages 114-15 of that work :—

The Sutra which is found in Case XVII and named *Fuh* (for Fo) *mieh-to-hau-kwan-hom-tsang-sang-king*, is one that deserves some notice, not only on account of its primitive character, but for the curious matter to which it relates, viz., the ancient mode of burial in use among the *Chakravartins*, or, universal monarchs. It is well known that Sâkya Buddha directed his funeral obsequies to be conducted according to this rule, and it is a question of some importance who and what these Chakravartins were, and what was the character of their sepulture. The following abstract of the Sutra in question may throw a little light on the matter. Bound up with this Sutra, and forming a component part of it, is the history of Buddha's begging-dish or Patra ; and there are such curious resemblances between this history and the story of the Sangreal (the *Sacred Dish*), that it is almost impossible not to recur to the tale of Arthur and his *Round* Table, connected as it is with this story of the Holy Dish and Sir Galahad, the pure knight.

Respecting the funeral rites of the body or relics of Buddha.—" Thus have I heard. On a time the Blessed of the world (Bhagavat) was travelling through the country of the flowery people (Kusumapura). Then Ananda, bent on the advantage of men, asked him thus : 'Bhagavat ! after the Nirvâna, what is the character of the worship to be paid to the remains of the body of the Blessed one?' Bhagavat answered : 'After my Nirvâna, my remains shall be reverently treated, according to the rules or customs of the pure-minded man (Brahmachari), whose life (family) is extinct.' 'And what are those rules?' inquired Ananda ; to which the Blessed one replied : 'According to the method of the flying or space-traversing kings (Chakravartins), so shall my funeral obsequies be conducted.' Again Ananda asked of what sort these were ; to which Bhagavat replied : 'At the time of the funeral of a Holy king, his body is swathed in a thousand folds of pure linen (napkins), and then sprinkled with perfumes

and placed on a pyre of scented wood four-square, and then, having set fire to it, and the body being burned, the bones are collected and placed in a golden vase filled with scented liquor. Then is taken a large stone tile (or, of a stone make a tile), three cubits long and of equal breadth, and one cubit thick; this is supported evenly on the four corners by four upright pillars, and then in the very centre, underneath is placed the golden vase (so filled). Then from the immediate middle point of this slab is raised the *t'sah* (*i.e.*, the high pole which is supposed to surmount the Stûpa), and on this pole the customary hangings and ornaments are placed as offerings; after which they heap up the earth and form a mound (*pah*), to which offerings of perfumes and other things (viands) may be made, but in as much greater proportion to me (than to others), as my accumulated merit through past ages has made me the most honourable among all the teachers and leaders of men. And whoever thus honour my remains, if it be only by helping with a handful of earth to raise a mound, or afterwards by offering to it, his merit shall be incalculable, and his present happiness and welfare equally great. Such is the law respecting my relics.'

"'Once more, with respect to my alms-dish, the reverence (sacrifice) paid to this shall be the means of rescuing the world from a state of misery, and whilst it rests with men, of producing a religious spirit; and then a Shaman, by the power of truth, shall be the means of converting the world, and leading them back from error, so as to escape Hell, and attain to the three blissful conditions of Being.'

"Ananda asked what alms-dish Buddha spoke of? 'Even my own,' Bhagavat replied, 'which was given me by the four Maharâjas—four being joined in one—the dish which I have ever used for collecting my food, whether it has been given or not.'

"'This dish, after my Nirvâna, shall be a subject of contention among different countries, till the people having lapsed into disorder and wickedness, the duration of life shall be shortened, and general discontent and opposition to religion follow in consequence. Then the alms-dish shall appear in glory, shining forth with the five colours, and flying through the air—so it shall come and convert the people, and bring them back to obedience. It shall then go to the East and visit different countries, causing the people to obey the laws of religion, and giving increase and prosperity wherever it appears. But especially to the king of the farthest East shall the alms-dish be a token of happiness, and his life be agreeable to the same. After his death, the sins of impurity and lust shall prevail in every direction. The alms-dish being now dishonoured, the Nâga-râjas seeing it thus, shall take it to their own sea palace, to pay it reverence. And thus the existence of the alms-dish being forgotten, lo! every kind of sin and consequent misery will prevail, and the world becomes utterly degenerate. Then suddenly a pure-minded man, but poor and needy, named Sze-Go, becoming a Bhikshu, and giving up all gluttony, wine-bibbing, and intercourse with women, shall come to the door of the

Royal Palace and exclaim, 'I know where the alms-dish is!' On this the king, overjoyed, shall ask him within and say, 'Where is the alms-dish?'"

[On this follows a discourse, which is very obscure, but the main point is that the alms-dish can only be recovered by one perfectly pure; and finally, the object is attained by this perfectly pure Shaman, and the earth recovered from its loss and degeneracy.]

So far Dr. Beal. At first blush the analogies to some of the better known features of the Grail legend struck me as remarkable. Assuming, as it was natural to do, the identity of the tomb-vase mentioned in the first part of the story, with the alms-dish of the second and longer part, the points of likeness presented themselves as follows: Buddha connects the vase with the worship to be paid to his body after death; Christ, in Robert de Borron's poem,[1] connects the possession of the Grail with the symbolism of mass and sacrament—the alms-dish produces a religious spirit; according to Borron, the Grail influences its devotees spiritually[2]—the alms-dish appears flying in the air; Wolfram von Eschenbach makes the Grail fall from heaven[3]—the alms-dish appears in glory; according to Manessier, as Hector and Perceval lie on the field of battle wounded, the Grail appears to them in a great flashing of light—the alms-dish goes to the East; according to the Queste del Saint Graal,[4] Galahad, after accomplishing the quest, takes the Grail eastwards to Sarras, whilst the continuator of Wolfram von Eschenbach, Albrecht von Scharfenberg developing a hint of his predecessor,[5] sends the Grail eastwards to Prester John after Parzival's death—the prevalence of sin causes the disappearance of the alms-dish; according to the Queste del Saint Graal, the Grail goes to Sarras because Britain is unworthy to retain it,[6] whilst Gerbert[7] represents that it was removed from the ken of man owing to the sinfulness of the world—the alms-dish brought increase and prosperity with it; throughout the Conte du Graal the Grail is a miraculous food-producing vessel, as is likewise the case in other romances of the cycle, whilst the achievement of the quest ends the enchantments of Britain and restores the Waste Land to fertility[8]—the nameless Buddhist king is overjoyed to hear of the possible recovery of the dish; the accomplishment of the quest brings healing to the wounded king of the Conte du Graal[8]—the pure hermit answers

[1] *Studies*, pp. 64*a*, 71.
[2] *Ibid.*, p. 74.
[3] *Ibid.*, p. 25.
[4] *Ibid.*, pp. 2-3, 51.
[5] *Ibid.*, p. 27.
[6] *Ibid.*, p. 51.
[7] *Ibid.*, p. 23.
[8] *Ibid.*, pp. 86-90.

to the Nasciens of the Queste del Saint Graal; and finally, the perfectly pure Shaman who recovers the alms-dish may be set against the spotless virgin Sir Galahad of the same romance.

I felt that it would be unsafe to make Dr. Beal's summary the basis of any investigation into the analogies which I have just set forth, and I therefore asked him to furnish me with a complete translation of the Buddhist story. Dr. Beal complied most readily and kindly with my request, and sent the following translation, which I print as it comes from him, together with his prefatory remarks. I should note that he describes it in a private letter as "a very imperfect translation", and explains that he was not able to keep the MS. for more than one morning. The passages in square brackets are additions or explanations of the translator; those in round brackets are either quotations in the original or alternative renderings.

This Sûtra is called *Fo-mieh-tu-heou-kwân-lin-tsâng-sung-King*, that is, "the Sûtra which relates to the embalmment and funeral obsequies of Buddha after his death."[1] The name of the translator, from some Western language (not necessarily *Sanscrit*), is *lost*, but the title of the book is found in the Great Catalogue of Buddhist books drawn up in China under the Yuan dynasty, and called *Chi-Yuan-lu* (*Nanjio*, No. 1612), dating 1285-1287 A.D., and referred by the compilers of this Catalogue to the *Tsin* dynasty (the *Western Tsin*), which would correspond with the date 265-316 A.D.

It is a Sûtra of the Hinayâna or Lesser Vehicle,[2] which would tend to show that it is a primitive composition, and it seems to me there can be no reasonable doubt that it was brought to China in the third century of the Christian era.[3]

The following translation is given subject to correction, but in the main may be relied on:—

Thus have I heard: on one occasion the "All-loving" (Buddha) was passing through the country of flower-people (Kusumapura or

[1] Nanjio's *Catalogue of the Buddhist Tripitaka*, p. 124: "Sutra for putting the body in the coffin and sending it in the funeral after Buddha's entering Nirvana."

[2] This is on the authority of the K'-yuen-lu (Nanjio, No. 1485), a catalogue of the Buddhist canon, ascribed to the years 733-41.

[3] It should be noted, however, that, to judge from Nanjio's catalogues, our Sutra is missing from the oldest catalogue of the Buddhist canon, the compilation of which is ascribed to the years 502-07.

Pâtaliputra), on which occasion Ananda, for the satisfaction of men, addressed the "All-loving" as follows: "All-loving! after thy decease what are the ceremonial rules for consigning thine honoured body to the coffin?"

The All-loving answered: "Only[1] from this sorrow-laden body the sorrowless Buddha.

"After my decease my burial (funeral obsequies) shall be conducted according to the ceremonial rules observed on a like occasion at the death of every purely-descended (*Brahmachari*) person."

Ananda replied: "And what are these ceremonial rules?"

The All-loving replied: "They are the rites observed at the burial of the space-flying kings (Chakravartins)."

Again he said: "Would that thou wouldest declare what these rites are."

The All-loving said: "At the funeral of a holy king, to preserve his remains there are taken 1,000 folds of camlet to swathe his body with; scented perfumes are placed above, and beneath there is arranged a bier of scented wood on which the body is placed. Then at each corner the bier is set on fire for the cremating of the body. The bone relics, having been cleansed with scented water, are put in a golden pitcher, whilst above (the pitcher) is placed a stone slab, three cubits long and broad, one cubit thick. This is supported at each corner by a pillar, and the relic casket placed exactly in the middle underneath. Then a tee (Ch'a) is raised above with silken streamers and all that is usual, and the earth piled up into a tumulus. Scents and flowers should be offered up to this, in honour of Buddha, in recognition of his four-fold love to all living creatures, and his perfect accomplishment of the six *pâramitas* (the six transcendental virtues) during endless ages, for the good of all classes of existing things, and finally on account of his perfect accomplishment of the highest condition of wisdom as the unconditional and unattached Tathâgata, the guide of Devas and men, the most honoured and most difficult condition to accomplish.

"Thus everyone who offers but a handful of earth to this sepulchral mound shall gain boundless religious merit.

"But afterwards, when the end of the age comes, there shall be a corruption and a general perversion of the people, and social divisions will prevail everywhere. For the sake of remedying these evils I leave behind me my sacred Relics and my *begging-dish* (Pâtra), for the purpose of averting the misery resulting from the

[1] This appears to be introductory.

increasing wickedness of the world and benefiting all mankind. Then shall the people begin to worship (*these relics*) in the sacred buildings, and the Shamans, by exhorting the people who are in ignorance, shall cause the living to escape the condemnation of Hell, and the dead to avoid the chance of further misery, and ascend to the happiness of Heaven—thus shall the worship of Buddha (*the shrines of Buddha*) overcome those evils."

Ananda said: "And what is the begging-dish (of which you speak)?"

Buddha said: "*My* begging-dish (Pâtra), which was given me as an offering by the four heavenly great kings (Mahârajas), and which was formed by the four joining in one, the vessel from which the Buddha ate his food, from which no mortal should attempt carelessly to eat.

"After my death various countries will contend for its possession; the hearts of the people will become corrupted by error, and depraved, debased in their lives, they will hold lechery in high esteem, and reject all filial duty. Then the Holy phantom-dish will change its appearance and become visible; thus transformed, brilliant with the five colours, flying as it goes, ascending and descending, it will change the hearts of the people and bring back the multitudes who behold it to preserve the doctrines (virtues) of Buddha, and to let go their folly. Then being enlightened and obedient to the truth (true doctrine) they will erect temples of Buddha and disseminate his teaching. Passing towards the East, all countries over which it successively flies will be saved from calamities, and Rulers and people will prosper; the produce of the earth will multiply, and thus at last the misery of being born in a degraded state will end, and the happiness of heaven be enjoyed by all.

"The king of the East being a virtuous man and enlightened, the Dish will hover over his abode; after his death dissolute conduct will again prevail amongst high and low, and from love of false teaching the people will no longer respect or reverence the Dish when they behold it.

"Then the Deva-Nâgas (*heavenly dragons*, or, *Devas* and *Nagas*) seeing it, moved with a holy (or pitiful) joy, will escort the Dish, and return with it to the sea, where they will worship and adore.

"And now the king, lamenting the disappearance of the honoured Dish, will issue an edict offering a price of 1,000 gold pieces to anyone in the various kingdoms who will discover the place of its concealment and cause it to reappear; but, owing to the

depraved condition of society from the highest to the lowest, his invitation will be without effect. And now there will be an ignoble man named 'Sze'; this man, by false pretence, had become a mendicant priest; but in reality he was living in drunkenness and debauchery. This man, taking a child (or *his* child), coming to the gate of the king's palace, will say: 'I know the place where the Dish is to be found.' Hearing this, the king, overjoyed, will invite the Shaman to enter. He will then ask him where the Dish is. Answering, he will say: 'The king must give me the promised reward of 1,000 gold pieces.' This accordingly being done, then *Sze* continued: 'The dish has been stolen without doubt by a Shaman; let an order be given to extort the secret by torture, and to banish all Shamans from the country.'" [Here follows an obscure and perhaps corrupt passage, apparently to the effect that by so punishing crime the people and ministers would honour the king.]

The king now inquires: "What, then, is your religious profession?" In reply he says: "My name is *Sze*, and I worship Buddha." Again the king asks: "And what are the religious rules of Buddha?" Hereupon he says there are 250 religious rules, requiring mercy, love, purity, chastity, and truthfulness. Moreover, deceit and slander are forbidden. No wine is to be used, for we are taught it would be better to take poison and die, than to indulge in wine and live."

The king, having expressed his admiration of these rules, turns round and says: "Your profession demands mercy, but you ask me to kill; your profession requires poverty, but you have taken gold; your profession insists on chastity, but you are living carnally; your profession demands truthfulness, but you have falsely accused the Shamans of stealing the Dish, and you would make me commit the crime of slaying the innocent; your profession forbids wine, but you are living in drunkenness."

The upshot of the story is that the king is moved to acts of piety, rebuilds the temples, cleanses the sacred shrines, and so the age is renovated and the Sacred Dish recovered. But there is no account of any Quest.

On comparing the full text of the legend with the summary it will be seen that the most marked points of similarity between it and the Grail legend have either disappeared, or the extent of the similarity has singularly diminished. In the first place we note the fact that the alms-dish is not, as was reasonable to assume from the summary, one of the objects upon which Buddha lays

stress in the instructions respecting his funeral, and the impression is left that we have here two independent legends which have been clumsily fused into one. In the second part of the story the funeral relics almost entirely disappear, and we may safely leave them out of account and confine our attention to the begging or alms-dish. The importance of this is self-evident; if the miraculous bowl of the Buddhist legend had figured in as close contact with the death and burial of Buddha, as in certain French romances the Grail does with the death and burial of Christ, it would have been difficult, not to say impossible, to deny connection between the two legends, neither of which apparently belongs to such a primitive stage of mythical fancy as to allow us to refer similarity in such a point as this to original community of mythical conception. Taking the alms-dish story by itself, we furthermore note the absence of a "quest" and of the "pure-minded Shaman" who is to achieve it, the absence, in fact, of the two most striking parallels between the two legends. Again, whilst the summary gives the impression that the loss and recovery of the sacred dish is the backbone and motive of the Buddhist legend, that derived from the complete text is of quite another kind. The real *raison d'être* of the legend is seen to be partly ethical, partly polemical; it is at once a rebuke of hypocrisy and the record of a strife between two rival theological schools, or, more probably, between the orthodox hierarchy and a would-be reformer who had left its ranks. The insistance upon one feature of the ascetic life so strongly emphasised by the summary of the Buddhist legend likewise disappears, and in the complete text, continence figures merely on the same line as the other cardinal virtues, instead of being, as in some of the Grail romances, the guiding principle of the story.

The essential points of likeness between the two legends thus reduce themselves to the following: both ascribe miraculous properties to a dish or bowl which had been in the possession of the founder of the religion; among these are the power of producing spiritual change in the hearts of the people amongst whom it sojourns, as also of producing material prosperity; its disappearance owing to the prevalence of sinfulness; its journeyings towards the East, and the desire of a king to recover it. The two latter points may, I think, be put aside at once; the alms-dish legend, as we have it, is obviously in part a record of the vicissitudes of Buddhism among populations of the country we now call China, and possibly of Japan; the eastward progress of the sacred dish is thus

a symbol of the eastward spread of the religion. It is otherwise with the final disappearance of the Grail in the East as we find it in the romances; some of these,—*e.g.*, Robert de Borron and the Queste del Saint Graal—begin their story of the holy vessel with its first possessors, immediate followers of Christ, who have, of course, their home in the East, and its final return to its original home is a natural device on the part of writers, puzzled to know how to dispose of the sacred object whose fortunes they had been relating. As a matter of fact, the earlier stratum of romances brings the Grail from East to West and leaves it there.[1] It is the same with the nameless Buddhist king whom Dr. Beal, in a private letter to me, equates with Arthur. The latter, as we shall see presently, belongs to the latest stage of development of the Grail legend, and his conduct is the natural outcome of his substitution for an older personage. The coincidence in these two instances is purely fortuitous.

The other analogies stand on a different footing, and demand careful attention. I have tried to show that in the great complex of romances dealing with the Grail, that portion which recounts its quest is the oldest, and had originally nothing to do with Christian legend. The earliest representative of this stage in the growth of the tale is the poem left unfinished by Chrestien de Troies in 1190. Here the properties of the Grail are solely of a material nature; instead of a king who desires that it should be recovered from afar, there is one in whose possession it is, and who is to derive advantage from the presence at his court of a knight fulfilling conditions which are not necessarily connected with the Grail itself. At a later period the story was amplified by the addition of matter recounting the early history of the Grail which was identified with the cup used by Christ at the Last Supper. It thus assumed distinctive spiritual attributes, although its original nature is shown by the fact that the very romances which insist the most upon its symbolic and mystic character retain its material properties, such as its capacity for producing food.[2] Moreover, whereas the earlier forms of the story make the quest purely a private venture of Perceval's, the later ones implicate all Arthur's knights. The quest thus necessarily assumes an ideal form, and Arthur forcedly takes up a different attitude towards it from that ascribed to him in Chrestien's poem, where he is a mere lay figure. This is, in brief, the theory I set forth before I knew anything of the Buddhist legend. As will be seen, it excludes all idea of

[1] Studies, p. 76 *et seq.*

[2] *Ibid.*, pp. 74-75.

direct influence of the latter upon the Grail story. If the romance writers had in any way derived their matter from the Buddhist tale, why should they have so entirely altered the march and framework of the story? why, in particular, did they represent their miraculous vessel under a purely material aspect?

How does the matter stand with the only other theory which has attempted to account for the entire development of the Grail legend, that elaborated by Birch-Hirschfeld in his *Sage vom Gral?* This theory takes one of the romances, the poem of Robert de Borron, in which the early history of the Grail and its connection with Christ are most fully set forth, one, too, which insists in the strongest way upon the mystic and symbolic nature of the holy vessel, and makes it the starting-point of the entire cycle. The later romance writers are held to have partly eliminated all references to the original Christian character of the Grail, partly transformed them; to have materialised the holy vessel, and to have imagined the quest as an afterthought.[1] This theory at first sight seems to agree better with possible acquaintance with the Buddhist legend. Birch-Hirschfeld, however, derives *all* the elements of his hypothetical earliest form of the legend from writings which are well known to us, from the canonical gospels and from the Apocrypha, so that if his premises are once admitted, there is no need of outside influence to account for the development of the story. It would, moreover, be almost as difficult to explain the disappearance from Borron's poem of the material properties of the holy vessel in the Buddhist legend, if we look upon that as the source of his version, as it is to explain the disappearance of the spiritual properties from Chrestien's poem upon the contrary hypothesis. Again, it is almost certain that Birch-Hirschfeld's sketch of the growth of the cycle is wrong; the work which he makes the starting-point of the legend belongs in reality to a secondary, if not to a tertiary stage of development; the quest is really the oldest portion, and Chrestien's poem really the oldest member of the cycle. Monsieur Gaston Paris, the greatest living authority on the Arthurian romances, is as emphatic in this sense as I am myself, and he is supported by such competent scholars as Professor Ernst Martin and M. Etienne Muret.

The union of material and spiritual properties in the Grail is thus seen to be an outcome of the fusion of two distinct elements, one—the older, according to Birch-Hirschfeld, the younger according to me—due to Christian legend, the other due to non-Christian

[1] *Studies*, p. 108 *et seq.*

tradition, by me held to be pre-Christian and distinctively Celtic. Whichever theory be right, the assumption of the existence of a Buddhist prototype not only removes none of the difficulties which confront us in framing a general scheme of development for the Grail-cycles, it rather accentuates them. It is the same with the other point of analogy I have noted: the disappearance of the miraculous vessel owing to the sinfulness of the world. In what I regard as the earliest stratum of the Grail romances no such conception occurs--the court of the Grail king is a realm of its own, sharply marked off from that of Arthur. It was only at a later date, when that Grail had been identified with the Paschal cup, that the romance-writers, smitten with chronological scruples and anxious to bridge over the chasm between the Apostolic and Arthurian ages, imagined the fable of the Grail's withdrawal from the world, represented by Arthur's court. Birch-Hirschfeld's hypothetical earliest romance gets over the difficulty by making the Grail-king, a companion of Joseph of Arimathea, live on until released by Perceval, a knight of the Round Table. It is inconceivable that Borron could have adopted such a puerile expedient if he had before him a story which laid special stress upon the disappearance of the sacred vessel. Here again the assumption of a Buddhist prototype raises difficulties instead of solving them.

It is, however, in connection with the fact, which at first sight is the most impressive—the attribution, namely, of the miraculous vessel to the founder of the religion by both legends—that the gravest doubts arise with regard to any possible influence of the one legend upon the other. If the Buddhist story existed in the third century A.D. or earlier, substantially in the form we now have it, and was introduced into the apochryphal gospels at a period when these were in course of formation, say from the second to the fourth centuries, is it conceivable it should have left no trace of its existence beyond a mediæval legend eight hundred to a thousand years younger? Again, if it only became known in the West in the tenth-eleventh centuries, could it have then been associated with Christ, the tradition concerning Whom, whether canonical or apocryphal, being by that time perfectly fixed? We know that Buddha became a Christian saint, but Christian hagiology stands on a perfectly different footing from the accounts of Christ's life. The presumption to be drawn from the Baarlam and Josaphat legend is all against the possibility of the Christian elements in the Grail legend being derived from a Buddhist source. The latter might, if then extant and if known

to the West, have added a new chapter to the *Acta Sanctorum*, it could hardly have become embodied in the *Vita Christi.*

The analogies between the two legends thus refuse, upon close consideration, to resolve themselves into definite points of contact. It is the same with what at first presents itself as a case of actual connection between the Grail romances and the East. One of the forms in the legend, that preserved in the *Parzival* of Wolfram von Eschenbach, differs strongly from Chrestien's poem and from all other versions.[1] Among the features peculiar to it are the wanderings of the hero's father in the East, his marriage, and the consequent birth of a son, who afterwards travels westwards to find his half-brother Parzival, and returns to his Eastern home, taking with him as his bride the daughter of the Grail king. Wolfram knew Chrestien's poem, to which he repeatedly alludes; but he professes to have followed in preference a poem by Kyot, who found, at Toledo, the tale written in heathen tongue.[2] This would seem to point to a Jewish-Arabic original, worked up by Kyot, whom Wolfram describes as Provençal. The part taken by the Jews in introducing Oriental legends into European literature is too well known to need more than a passing reference.[3] There is nothing impossible, or, indeed, improbable, in the fact of a Buddhist legend travelling from the East to Moorish Spain, and being there worked up, probably by Jewish hands, and passed on to southern France. Let us, however, bear in mind that the chief point of similarity between the two legends, indeed the only reason for assuming that the one may possibly be the source of the other, is the presence in both of a sacred dish or bowl. Now, the distinguishing feature of Wolfram's account of the Grail is his description of it, not as a *bowl*, but as a precious stone. It is quite certain that he had no idea that it was a vessel of any kind, and that he had never heard of it as the Last Supper cup, or as in any way connected with Christ. This part of the case may be briefly stated thus: the facts which alone warrant the hypothesis of connection between the two legends are absent in the only instance of possible formal contact between them. Those who are acquainted with the Grail problem are well aware that Wolfram's statements respecting Kyot are open to grave doubt.[4] I have preferred, however, to accept them as true, and nevertheless arrive at the same conclusion as before, namely, that to assume our Buddhist legend as the source of the Grail cycle, so

[1] *Studies*, pp. 25-26, 261-63. [2] *Ibid.*, p. 6.
[3] Cf. Benfey's *Pantschatantra*, and Jacobs' *Fables of Bidpai* (1888).
[4] *Studies*, pp. 261-63.

far from clearing up difficulties, makes existing confusion worse confounded. For, evidently, on this hypothesis, Wolfram's work represents the earliest stage of the Grail cycle, and the Christian holy vessel legend thus starts with a tale in which no holy vessel occurs at all. It may be argued that Wolfram or Kyot misunderstood his original; but as a matter of fact Wolfram's special presentment of the Grail is almost certainly due to his having misunderstood Chrestien. The French poet never completed his work, and never fully explained what the Grail was; he simply alluded to it in general terms as "le graal", a very precious and wonderful object, but never described it in any detail. Wolfram's knowledge of French being slight, he, in ignorance of the real meaning of "graal", imagined it to be a precious stone.[1] It is not at all improbable that he may have heard some French version of an Oriental tale touching a wonder-working stone fallen from Heaven, and that he may thence have derived some of the features special to his poem; but it is certain, in so far as certainty is attainable in such perplexed questions as the present one, that this Oriental tale was not the history of Buddha's alms-dish.

If the hypothesis of direct influence of the Buddhist upon the Christian legend be set aside, how are the analogies I have pointed out to be accounted for? I may frankly say that I have no alternative hypothesis to offer. It was my endeavour, in tracing the development of the Grail legend, always to move along the line of least resistance, to utilise the facts which lay nearest to hand, to accept that explanation which seemed to me the most natural and simple. In connecting the Grail legend with Celtic tradition, I had many positive indications to guide me, many undoubted facts upon which to base conjecture. In both of these respects, I am at a loss as regards the Buddhist story. Speaking as an outsider, it strikes me that the tale contains numerous allusions of a partly historical, partly doctrinal nature which should enable Buddhist scholars to form an idea as to the conditions under which it originated. When this is done, when the place of the legend in the development of Buddhist tradition is definitely ascertained, it may be that all the questions which have been raised will at once be solved. At present I can only throw out a few tentative suggestions for the consideration of those competent to deal with the Buddhist story upon its merits. Both Grail and Alms-dish may ultimately resolve themselves into symbols of the productive and reproductive forces of nature. It is noticeable that the Alms-

[1] *Studies*, p. 261.

dish is in some way connected with the divinities of the sea. The sea birth of Aphrodite, the Vaenic origin of Freya, the Teutonic Aphrodite, at once suggest themselves in this connection, as do also the facts that the Irish Land of Promise and Plenty and Youth, Tir-na n-Oge or Avalon, often lies beneath the waves; that the Irish sea-god Manannan Mac Lir was lord of a land of Cockayne, and possessor of inexhaustible cauldrons and goblets, which are certainly prototypes of the Grail in the French romances.[1] The identification of the other world figured as a land of feasting and all joyousness, with the land of the Hereafter, though not necessary, was almost inevitable, and may to some extent account for the union of material and spiritual properties in the object which originally symbolised the former conception alone, but later the extended conception. Much, again, has been heard of the direct and formal influence of Eastern upon Western myth and tale. Is the influence of the latter upon the former as impossible as would seem to be assumed by most investigators? I merely note in this connection that the Buddhist text is only extant in an edition which professes to reproduce one compiled in the fourteenth century. A similar title to that of our tale is found in catalogues the compilation of which is assigned to a much earlier date, but is it absolutely certain that identity of title always implies identity of text? We know how in Western literature texts were continually being reshaped, enlarged, abridged, interpolated throughout the whole of the classic, post-classic, and mediæval periods. We also know that a similar state of things prevailed in the East. Al Beruni quotes from a text of the *Bhavagad Gita*, which must have been very different from the one we now possess;[2] and the innumerable ramifications of the Pantschatantra or Bidpai literature show how easily story-groups in the East expanded, contracted, or altogether transformed themselves.[3] If ultimate research should then necessitate the hypothesis of borrowing, it seems to me that a fair case might be made out of a repayment by the West of some of the heavy indebtedness contracted by it to Eastern story-telling.

The foregoing facts have a general bearing upon the studies of folk-lore and comparative mythology, both of which rely very much at the present moment upon texts either translated from archaic languages, our knowledge of which has hardly passed beyond the tentative

[1] *Studies*, p. 192 *et seq.*

[2] Al Beruni's *India*, Sachau, 1888, vol. ii, pp. 264-65.

[3] Cf. Jacobs' *Bidpai* for a pedigree and an analytical summary of this literature.

stage, or else taken down in an imperfect manner from contemporary savage or semi-savage races. There is no reason why such texts should not be used, provided it be with caution, and with due perception of the fact that all results based upon them are of a purely hypothetical nature. But it is necessary to protest with some emphasis against the acceptance of far-reaching theories involving the most obscure and intricate questions in the past history of our race, upon the strength of archaic texts, whether from Babylonia, Egypt, or elsewhere, which may, or may not, be correctly understood, but which are certainly fragmentary, and the relation of which to other manifestations of man's activity in the past is, as a rule, little, if at all, apprehended by us. Suppose for an instant that Dr. Beal's first summary of the Alms-dish story had alone survived. Future investigators would have been justified in reaching conclusions respecting the relation of the two legends, Buddhist and Christian, which an examination of the complete text has shown to be untenable. Yet this text is in an infinitely better condition, the language is far easier, the summariser knew more of it than can possibly be the case with the many archaic documents which are being so freely used at the present moment for the purpose of reconstructing the early history of civilisation. Thus, although the legend of the Buddhist's Alms-dish may not have originated the "high story" of the Holy Grail, its consideration is not unprofitable to all engaged in one of the forms of the Grail-quest, the search for truth. We may learn from it a much needed lesson of caution: it exhorts us to "weigh all things", and to "hold fast" only to that which can be thoroughly tested and can stand the test.

ALFRED NUTT.

ROMAN REMAINS IN CARNIOLA, ETC.

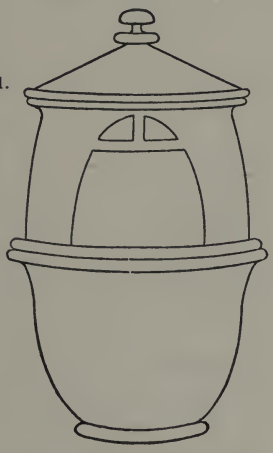
AMONG the Roman remains preserved in the *Rudolfinum* at Laibach, none are more interesting than those found at Dernovo in Carinthia (Krain). Dernovo is a small village about four miles south of Gurkfeld, one of the stations on the railway between Laibach and Agram, and close to the Croatian frontier. Roman remains have been found to a considerable extent in its neighbourhood, and lately—since 1883—fresh excavations have brought to light a vast number of objects, owing mainly to the zeal and prudence of a local investigator in whom the peasants are not unwilling to confide, and who, in turn, is not unwilling to sell his discoveries to the museum at Laibach. The finds have been described by the learned curator of the *Rudolfinum*, Dr. Deschmann, in the *Mitteilungen der k. k. Centralcommission zur Erforschung der Baukensmale* (xii, 17-36), but the facts will probably be new to the readers of this *Review*.

The finds were mainly sepulchral, along the line of what is thought to be the old Roman road, and the number of graves opened is very large—I believe, over 400. One tomb seems to strongly resemble the Roman columbaria, being a vaulted chamber with six niches for urns. Each niche was fourteen inches high, thirteen broad, and ten deep. In another grave were discovered wall-paintings, of which Dr. Deschmann has published coloured reproductions. They are rough indeed, but show considerable force. Whether they really resemble the Pompeian paintings so closely as he thinks, I should not like to say. At any rate, the existence of these wall-paintings is very remarkable, and is no doubt the result of close communication with Italy. The smaller objects consisted, as usual, mainly of lamps, coins, and urns. The lamps produced a few rare stamps—*Leonetius*, *Vibiani*, *Vett.*—but were not otherwise remarkable. The coins of silver dated from Vespasian *cos. iter(um)* = A.D. 73, to Alexander Severus, the "brass" from Augustus to Gratian. Of the pottery, a few pieces were "Samian", as the ware is usually called in England, but mostly unglazed. Some of the shapes were very remarkable. In par-

ticular, there were found some largish urns, well made and coloured, of (to describe it roughly) barrel shape, with lids and curious openings. Some of these I attempted to sketch, and I append a cut of two.

The openings of fig. 1 on the front are three, one large one, with two small ones above it. Fig. 2 has a single rectangular hole with a pattern in red and white round the body of the urn; on the top is a bird. Another urn, similar in shape to fig. 1, had only

Fig.1.



Opening on the other side of Fig. 1.



Fig.2.



slits. These urns are remarkable in themselves, and though I do not understand Dr. Deschmann's reasons for calling them Christian, there is no reason why they should not belong to a date subsequent to the legitimation of Christianity. Still more remarkable is their similarity to the so-called house urns which have been found principally in Italy and North Germany, and which belong to an undoubtedly pre-historic civilisation. The work is, of course, more finished in the Dernovo urns than in, for instance, the Marino urns described by Sir John Lubbock and Dr. Pigorini in a recent volume of the *Archæologia* (xlii, 108, 1869), but it is very possible that the former are a survival. Such survivals are common enough. Mr. Evans (*Through Bosnia*, p. 17) notices that the Croatian peasantry to this day use vessels which are obvious survivals of those used in Roman times. It is, perhaps, not too rash to lay some stress on the two little holes over the main opening in fig. 1, and compare them with the openings—on the one hand —in the roofs of the house urns, and, on the other hand, in the roofs of the modern Slavonic houses. That these openings in the "house urns" represent windows, is not, I think, open to

real doubt, though they are windows which did duty for chimneys also. Somewhat similar are the two little openings which one sees, in one shape or another, on the front of the roofs of cottages in Galicia, the Bukowina, and Transylvania, and at the ends of what are sometimes called Roumanian houses. The other pottery found at Dernovo was less remarkable.

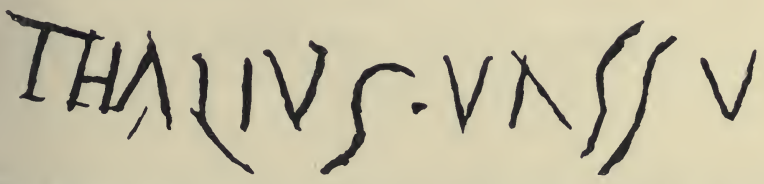
The cemetery from which the objects described were excavated belongs probably to a Roman town called Neviodunum. An inscription was long ago found in a neighbouring village, to the following effect :—

I . O . M
ET . GENIO
MVNICIPI
FL . NEVIOD
SACRVM .
L . POMPEIVS
INGENVS . B .
COS . V . S . L . M .

and the name appears on other inscriptions from the same district (*C.I.L.*, iii, 3915, 3921 ; Müllner, *Emona*, p. 312). From the inscription quoted, it is plain that the place must have been a *municipium*, founded by one of the Flavian emperors, Vespasian or his sons, and it is probable that the town, with some other districts of Pannonia, was included in Italy proper by Hadrian. This is practically all that we know of its history. It is not even certain whether it is the same as the Neviodunum mentioned in the Antonine Itinerary (259, 14, Wess.) as lying between Emona and Siscia. Emona is the modern Laibach, as I think scholars will continue to believe, despite the arguments of Dr. Müllner, and Siscia is Sissek on the Save. Dernovo certainly lies between these two places, but the distances of the Itinerary fit in as badly in Pannonia as they do in some parts of Britain. There is, of course, no objection to supposing two towns of the same name. It is a common Keltic place-name. There was one in Moesia, and Cæsar mentions three in Gaul, nor is there any want of traces of Kelts in Krain.

There has been lately found in Colchester a Roman urn of Upchurch ware of a common shape, about fifteen inches high, con-

taining bones, round which is an inscription. The reading, which seems fairly certain, is—



The letters were probably scratched in after baking, and, to judge by their shape, may belong to a fairly early period. They form a good specimen of the Roman "vulgar script", of the less special type. The "pointing forward" of the T and H (not T, H) is characteristic, and may be observed, for instance, on the leaden tablet found at Lydney, which is engraved in Mr. Bathurst's book, and in the *Transactions of the Bristol and Gloucestershire Archæological Society* (vi, p. 80). A, with a vertical instead of a horizontal bar, is exceedingly common. The cut is printed from a "phototype block", prepared from an excellent rubbing sent me by Dr. Laver, to whom I am indebted for the particulars of the find.

F. HAVERFIELD.

NOTES FROM PARLIAMENTARY PAPERS.

No. 8.

Report of the Special Commission for 1887 on British New Guinea.

THE extensive delta appertaining to the Fly River is at present but poorly defined on the chart; only one entrance, that between Bampton and Kiwai Islands, having been penetrated or surveyed. I am inclined to think, however, that a better entrance may be found to the eastward of Kiwai Island, but this is only conjecture on my part. The Fly River, as far as I have been up it, is thickly populated by a purely agricultural and hunting people, living in large communities, while some of the houses in the villages are over two hundred yards in length. (I was in one myself that measured two hundred and thirty-seven paces!) At Bampton Island the natives are peaceable and quiet, but not as fine a race as those living on the opposite Island of Kiwai, at the chief village of which island (bearing the same name, Kiwai) are two large villages separated only by a creek, and it is here that a boat's crew were massacred some six or seven years ago.

Following up the river, traces of careful cultivation are seen here and there on the banks, the gardens or plantations being kept free from weeds and planted with crotons and other bright-leaved shrubs between the bananas or other fruit-trees, besides being systematically irrigated by dykes cut at regular intervals, which, filling at high water (the river being perfectly fresh even close to its mouth), remain full as the water recedes.

About sixty or seventy miles above Soomaioot, but on the opposite side, another large community is met with at a village called Abru, under a friendly chief named Papiua. Several large creeks or rivers join the main river below this village, but whether they are flowing into the river or waters forming other mouths of this vast system remains to be proved. Some few miles below Abru, a curious stockaded village is seen quite on the river bank. It is difficult, however, to surmise what the defensive erection (which is about forty feet high) is for, as the dwellings of the natives are built up against the high walls on the outside, so that

any attacking force could easily set fire to the buildings and burn the whole place.

On my landing here all the women and children, who had lined the shore previously, disappeared into the bush, which is always a sign that caution should be observed in any further approaches or dealings with the people. They (the natives), like the inhabitants of Abru, are not a large race, but appear a stalwart people, and are entirely free from any traces of skin or other diseases.

To the westward of the Tait, some twenty to twenty-five miles, the Katow River enters the sea. At its mouth two large communities have settled in two villages situated close together and called Mowalta.

Considerable intercourse has been had with these natives for some years by the crews of the numerous boats employed in the pearl-shelling and bêche-de-mer industries coming in for shelter or for water, the village being conveniently situated near the fishing-grounds on and off the Great Warrior Reef. These people are a quiet, tractable race, and many of them have been employed at times in the fishing-boats. Here I found a curious custom that I have not noticed elsewhere in New Guinea: when any epidemic breaks out among them, the sick people are sent out of the village to some temporary huts that have been erected about a mile to leeward, and there remain in a *quasi* quarantine until they either recover or succumb to their diseases.

The women, as elsewhere, do most of the plantation work, being guarded when at work or on their way to and from their gardens by their husband, brother, or father, armed with a long bow and a belt full of arrows, the men never going about unarmed or allowing their women to leave the village without an escort, fearing an attack from some bush tribe, though the two interesting exploring trips, lately undertaken by Captain Cole to a distance of about thirty miles inland, would lead one to suppose that the inland and the coast tribes were on good terms with each other, mixing, as he and his escort of coast natives did, in a most friendly way with the inhabitants of many of the inland villages. Some of the women at Mowalta are tall and well made, and appear capable of carrying heavy loads, practised as they are in bringing in large quantities of food daily from their gardens.

Your Excellency asks for any information I can give you in regard to the periodical attacks made on the inhabitants in the locality of Saibai Island by a marauding tribe that come from the westward. I regret that my numerous inquiries have enabled me to find out but little of these piratical warriors.

The exact locality they come from is still a mystery, the inhabitants of Saibai having no knowledge of them or their language, the latter being entirely distinct and many of their customs different. They had probably never seen a white man, until the Rev. E. B. Savage, who (happening to be at Saibai when their fires were seen on the mainland) fearlessly visited their camp and tried to hold some intercourse with them. They were very shy at first, but ultimately to the number of some hundreds flocked round him and did not attempt to molest him. He describes them as a much lighter race than the rest of the New Guinea natives, and as having long, straight hair, while some of them have their nasal bone pierced in three places, into which are introduced pieces of bone or shell. They appeared entirely unacquainted with firearms.

Mr. Deputy-Commissioner Romilly transmitted some account of the present condition of the natives of South-eastern New Guinea.

As every action of any importance in the life of a native is suggested and controlled by superstitious belief, it may be of interest to describe shortly some of the more noticeable of them. It is supposed that every man and woman of a tribe has a spirit in constant attendance on them, a spirit which during his life is part of himself, and which after his death is all that is left of him. After his death his human appetites enter into it, it becomes susceptible to hunger and thirst, the desire to till the soil and go out hunting, and, most important of all, the love of home seems to become much developed. The spirit is carefully attended to by the dead man's relations ; food and water are provided for it, and are set apart with his hunting and fighting spears in some locality which in life he was in the habit of frequenting. This is a most sacred obligation on his relatives. But if he should happen to be killed by a foreign tribe, as is generally the case, or if he should die in a foreign land, his spirit cannot return to its original haunts till steps have been taken which are satisfactory to the surviving relatives. In native warfare it is necessary to obtain a head of any member of the tribe by whom he was killed. This done, the spirit can return. There is no statute of limitations. It is as necessary twenty years after his death as it would be twenty hours.

If instead of having the natives of another tribe to deal with, it becomes a matter between natives and white men, it is not held to be absolutely necessary that a white man's head must be procured before the unjust spirit can be laid. Heavy payment in trade

goods will answer the same purpose. It was for this reason, when I was entrusted with the charge of returning some 400 New Guinea natives from Queensland to their proper homes, that I strongly urged the Queensland Government to make ample provision for the men who had died during their term of service.

About 100 bundles of trade goods were distributed to the relations of men who had died in Queensland. Unfortunately, owing to the extreme inaccuracy of the lists supplied me by the Queensland Immigration Office, and for which their Government agents were responsible, it was found that in some cases it was omitted to make compensation where it was due. During the last two years two of the murders committed in the south-east were probably caused by this omission. As there was no prospect of obtaining compensation, the natives had to take the first white heads they could procure.

There are other forms of superstition which affect the intercourse between natives and whites. The spirit I have alluded to, and which by a stretch of imagination might be called the soul, is by no means the only one by which their lives are regulated. Indeed, in the case of the soul that rarely becomes troublesome till its owner is defunct. They are much troubled with dreams, and in their dreams they are told to work for one man and not for another, to bring him good measure or bad measure, to cheat him or not, as the case may be, or very frequently to refuse to trade with him at all. They are inveterate thieves, but they experience no sense of shame when they are discovered. They frequently say that they can feel an invisible power which compels them to put out their hand and close it upon some article which they covet, but which does not belong to them. Naturally the white trader resents the action of this invisible power, and many serious trading disputes leading to serious consequences have been the result.

Many powerful spirits are supposed to constantly surround the white man. If sickness should break out in a district, should some house be burnt by accident, should a trading canoe be swamped, if any white man is in the district his spirits or devils will probably be accredited with such misfortunes. If he has been on good terms with the natives they will very likely, by the command of their sorcerers, demand compensation from him. If he is a wise man he will pay it, as the only alternative for him in the event of a severe calamity would be to leave the district and settle somewhere else. They admit that the white man's fighting spirits are stronger than their own, and in consequence of this

belief they will follow a white man where in other circumstances they would not go by themselves. In their belief the mere sound of a gun is sufficient to frighten away the spirits by whom their enemies are protected.

I have said enough on the subject of superstition to show that, unless large allowances are made for them by white men trading in their midst, friendly relations are not likely to continue for long unimpaired.

Unfortunately the importance of the subject has not been generally recognised, and many a man whose last wish, for his own sake, has been to offend their prejudices, has done so unconsciously and with serious results to himself. No allowance is made for him by the natives on the score of ignorance. They assume that he is as conversant with their customs and superstitions as they themselves are. Their reasoning faculties are not sufficiently acute to perceive that it is impossible he should be so till he has spent some years of his life amongst them, nor do they possess any abstract idea of justice as we understand the word. The *Lex Talionis* they understand, but even in enforcing this law they would prefer two eyes for an eye and two teeth for a tooth.

It is impossible, while on the subject of the causes which promote quarrels and bloodshed between the two races, to omit the mention of one fruitful cause of disorder and murder. I allude to the intercourse between white men and native women. The question has frequently been discussed before, but I think the tendency in such discussions has generally been to place the white man on too low a pedestal and the native woman on too high a one. To explain my meaning clearly, it will be necessary to say a few words about the position women hold in their tribe, and the estimation in which they are held.

We are apt to fall into the same mistake in our estimate of them as the natives do in their estimate of us. The intimacy of married life, as we understand it, among them does not exist at all. A woman after marriage is as much her husband's property as his spear or canoe is, she is his slave, and has to bear his ill-tempers and castigations without complaint. She bears him one child every three or four years, and her services are entirely at his disposal whether he requires them for himself, or whether he requires them from a feeling of hospitality or profit, for another. She would have no voice in the matter. Virtue with her is generally compulsory, as any deviation from its path would bring her husband's anger upon her.

Sorcery and Superstitions.

It is not too much to say that nearly every action of a Papuan's life is regulated to some extent by superstition. He believes in ghosts, he believes in witchcraft, and he believes, until events occur to shake his belief, in the sorcerers who profess to be able to raise the one and control the other.

The number of spirits he believes in is quite enormous, as not only has his own tribe one complete lot to be propitiated or cursed as occasion may demand, but every other tribe has also a duplicate set; and the white man, of course, has a new and awful species of which he professes to know nothing. In dealings with these people, promises are broken and carefully-laid plans are upset in a moment by any slight *contretemps* which may occur, as it is described by them, to the malignant influence of the white man's spirit. Much as they curse the white man's devil at times, I imagine I have cursed theirs just as often, and with equal good-will.

The white man is held to be responsible for any accident which may happen to a native while in his service, and the unfortunate stranger has to pay heavily, or trouble is the result.

It happened to me not long ago to be in want of several men who spoke the language, and knew the people, of Moresby Island. The Moresby Island people had murdered six Chinamen, and it was necessary to give them the chance of coming to terms before proceeding to extremities.

At my request a chief in Hayter Island, called Peter by us, and six of his men consented to go. Three times they landed and held communication with the natives. On the first two occasions they were quite successful in their negotiations, as they brought me off some of the Chinamen's skulls and rifles which had been seized. The third time, as bad luck would have it, one of our troublesome spirits, so Peter assured me, must come and interfere, with the result that one man was speared in the side and leg, and his friends got him off to the ship with difficulty. To make matters worse, a few days afterwards I landed Peter at his own village, and there he found that during his absence one of his daughters had died and that his wife was ill. This also was laid to my charge, I suppose on the assumption that I should have kept this white man's devil in better order; and Peter had to be heavily paid before he would be appeased; if I had not done so it might have had the effect of making a previously friendly people hostile to us.

Of course, all the relations of the wounded man insisted on payment, as that misfortune was also laid at my door. This will serve to give a slight idea of the difficulties to be contended with when superstition is thrown into the scale. A curious instance came under my notice not long ago of the sacred importance attached to the heavy grass petticoat worn by the women. A party of ten Slade Island men started on a trading voyage to a village in Milne Bay on the mainland of New Guinea. They had often traded there before and had anticipated no danger. They had started at an inauspicious time, however, as an old woman, the night previous to their departure, had dreamed a dream and warned them against going. On their arrival in Milne Bay they were received in an apparently friendly manner, but at a given signal the whole party, with the exception of one young man and a little boy, were treacherously tomahawked.

The young man escaped and was subsequently taken to his home by me after he had been undergoing for a week the process of fattening for eating. The boy, however, was to have been killed with the others in spite of the prayers and tears of the women. When they found that those were of no avail they took off their petticoats and flung them over the boy's body, and there was not a man there who would have dared to so much as touch him while under this protection. As soon as the first excitement of the men had worn off and the women dared to resume their clothes, it was decided that the boy should be adopted by the tribe.

When I arrived some weeks after this occurrence at Slade Island I found the men there were very anxious to revenge the murder of their friends, but they could not start on a fighting expedition until their spirits were favourable. As the tribe they had to fight was a very strong one, they had to get allies from South Cape and other places, and those people would also have to wait for the same purpose, so that it seemed probable that a considerable amount of time would be wasted till three or four distinct lots of spirits could be induced to make up their minds at the same time. It is at those times that the sorcerers come to the fore. Their opinions would be taken by their tribes as to what was the proper time to start, and professional rivalry would certainly prevent a Slade Island and a South Cape sorcerer from agreeing too quickly. Eventually, no doubt, the matter would be settled between them; but, of course, if the expedition met with disaster or defeat, each individual sorcerer would lay the blame on his colleagues and would assign quite satisfactory reasons for so doing. Though I am now

confining myself to the islands of New Guinea, I do not know that the black art here is very different from that practised in the Solomons and elsewhere. Without repetition, however, there are a few traits in their character which I have not mentioned before which may prove of interest.

I find a passage in one of my journals which I transcribe in full, as it not only describes a certain sorcerer of my acquaintance, but also gives an idea of what our daily life was at that time:

"*April 29th*, 1885.—To-day Chalmers has gone off in the *Hannah More* to Aroma.

"I have given up the idea of East Cape, as my foot is still too bad to make it safe for me to move. It is two months since it began now, and it seems to get worse every day. Goldie is very ill, and most of our small population are down with fever. Minister in the *Dulama* has also gone to-day, and the *Manu-Manu* has not come in yet. They cannot have taken all this time to buy yams. Chalmers think some accident must have befallen the *Ellangowan*, as she is a month overdue now. The *Diamond* is also a month overdue, and the *Wolverine* six weeks. There are many things which ought to be attended to, but no means of doing it. The old sorcerer of the Roitapu tribes, at Chalmers's request, dug up the other day what has always been looked on as one of the most powerful of their spirits. It consisted of a fragment of pottery and two round small stones from the river, apparently iron lodes. He had to be paid very heavily, and did it with great reluctance.

(To be continued.)

CONFERENCE OF ARCHÆOLOGICAL SOCIETIES.

THE Committee appointed at the Conference of Archæological Societies, held at Burlington House, on November 15th, 1888, presented the following report upon the subjects referred for their consideration, and the report was unanimously adopted at the Meeting of the Conference held on 6th May last.

They would suggest to the Conference to submit to the President and Council and Society of Antiquaries the following Recommendations, with a request that they should receive their favourable consideration :—

1. That a Register of Antiquarian and Archæological Societies, hereinafter termed "Societies in Union", be kept at the rooms of the Society of Antiquaries, and that any Society desiring to be placed on the Register should submit its application to the Council of the Society of Antiquaries, who shall grant or refuse it as they think fit.

2. That every Society in Union shall send its Publications, and the Programmes of its Meetings, to the Society of Antiquaries, and in return shall receive a free copy of the Society of Antiquaries' Proceedings, and, should they desire it, a copy of *Archæologia* at the same price as that which it is sold to Fellows.

3. That if, on any discovery being made of exceptional interest, a Society in Union shall elect to communicate it to the Society of Antiquaries before themselves making it matter of discussion, the Society of Antiquaries, if it adopts it as the subject of a paper at one of its Ordinary Meetings, shall allow the Society in Union to make use of any Illustrations that the Society of Antiquaries may prepare.

4. That any Officer of a Society in Union, or any person recommended by the President, Vice-President, Chairman, or Secretary, or by two of the Members of the Council of a Society in Union, shall, on the production of proper vouchers, be allowed to use the Library of the Society of Antiquaries, but without the power of removing books, except by the express permission of the Council of the Society of Antiquaries.

5. That from time to time a Congress shall be held in London, the first to be summoned during the Summer of the present year. The Council of the Society of Antiquaries shall be Ex-officio Members, and the President (or in his absence one of the Vice-Presidents) of the Society of Antiquaries shall be President of the Congress. Six Members of the Council of the Royal Archæological Institute, and six of the Council of the British Archæological Association shall be nominated by these Societies to represent them at the Congress. Each Society in Union may send two Delegates to the Congress.

6. That the object of the Congress be to promote the better organisation of Antiquarian research, and to strengthen the hands of the local Societies in securing the preservation of ancient monuments and records.

7. That for this purpose it shall promote the foundation of new Societies where such appear necessary, and the improvement and consolidation of existing Societies where advisable, and suggest the limits within which each local Society can most advantageously work, and the direction in which it appears most desirable at the moment that the efforts of the Societies in Union should be exerted.

8. That the Societies in Union be invited to furnish reports from time to time with reference to their action in these directions. That the Royal Archæological Institute and the British Archæological Association be requested to offer to the Congress any remarks which may be suggested by their Annual Excursions or otherwise.

9. That the Secretary of the Society of Antiquaries be requested to act as Secretary of the Congress, with whom the Secretaries of the Societies in Union can correspond, and that the Council of the Society of Antiquaries be requested to advise on any matters which may arise between one meeting of the Congress and another.

Some little time has now elapsed since in our first issue we drew attention to the need there was for a systematic study of antiquities by the various Archæological Societies in Great Britain. The efforts of Dr. J. Charles Cox, whose letter in our second issue practically led up to the holding of a preliminary conference in London, and those who acted with him, cannot be said to have been in vain, when the final result has brought about a *modus vivendi*—not one that meets all our requirements, but still one that may be used as a means to still more satisfactory ends.

We are anxious, in now once more taking up the subject and drawing our readers' serious attention to it, not to be considered in any way antagonistic to the Society of Antiquaries. We recognise to the full the foremost position that Society holds both by its age and privileges, and by its well-skilled and world-known officers. With men like Dr. Evans, Mr. Franks, General Pitt Rivers, and others among its active workers, there cannot be any question about its right to claim the foremost consideration in matters wherein it takes a part. But we cannot help remarking at this stage of the proceedings in the question now before us, that the Society of Antiquaries claims too much and grants too little. It was not the Society who put forth of its own accord any expression as to the need for some of the reforms which are now advocated; but it was forced upon the Society by others who are not intimately connected with its working and action. It has always occurred to us that the Society of Antiquaries should be leader, not follower, in such movements as this. And, therefore, it seems all the more unfortunate that the very first of the recommendations should make it a matter of grace on the part of the Council of the Society as to whether a local Society should be admitted into the Union. Such a fatal beginning seems to us to shut out all hope of a successful union of local Archæological societies. Why should the Newcastle Society of Antiquaries, for instance, seek at the hands of the London Society what they have a perfect right, by virtue of their long experience and their splendid show of work, to command as their due? We conceive the whole matter has been looked upon from the wrong standpoint. It seems to us that the true way of beginning would have been to have first induced existing local Societies to come into union, and, secondly, to have set about forming Societies to represent any of the counties which are now not represented, or to have encouraged those whose funds or other means did not allow them to take many active measures in the cause of archæology in their districts. To take Middlesex as a case in point: the Institute and Association exist as rival bodies in our midst, and the county, as a county, is not properly represented by an archæological organisation, for the work done by the London and Middlesex Archæological Society is not much and is seldom if ever heard of. But in the proposals for the new Union the two rival camps are preserved, and are to be specially represented on the committee of the Union; while societies like the Surrey, Kent, Sussex, Cambridge, Essex, Derbyshire, Norfolk, Newcastle, and others, are to come cap in

hand and ask to be allowed to enter the union. We conceive that a great opportunity has been missed to bring about vast improvements and reform.

There is so much needed just now. First, we want to have established in each county a local museum ; then, with the museum as the centre, we want to establish the local organisation which shall render the museum of real service to students. All the money that can be spared should go in the preparation of *materia archæologica*—the building up of the vast edifice of scientific archæological research, scarcely a stone of which has yet been laid. Even in the matter of the museums that exist, they are at present nearly useless on account of their disorganised condition. The series of articles which Mr. Morland Simpson has recently printed in these pages from the original of Dr. Bahnson will show how much there is to be done in this very important branch of work, and the example has not been lost upon the Scottish Society of Antiquaries, whose learned secretary, Dr. Anderson, has, in the last volume of the *Proceedings* of that Society, given a very able and useful summary of the Scottish museums of archæology. But where is the similar work for England? The re-arrangement of all this old collected material, the bringing of it together into something like a useful manner, the connection between museums, as the demonstration rooms for the papers read at Societies—all these matters, and many others, need urgent attention, and our idea of the Archæological Union would have been to have begun operations upon these more pressing matters. Just consider also for one moment the absolutely *new* subjects that have of late years been brought within the boundaries of archæology. Until perhaps Mr. Seebohm's great book had appeared, very few people knew of the importance of manor rolls and tithe maps ; and yet Mr. Joshua Williams, in the pages of *Archæologia* nearly twenty years ago, had already written the first chapters in this new branch of study. Every local Society should be instructed on these points. What is most wanted, is not dissertations and opinions, but facts, and the means of getting at these facts in the readiest manner.

We grumble much at the want of an archæological survey of the country, and at the useless destruction which is yearly taking place among our monumental remains. Yet the splendid volume which Mr. Lukis prepared on the prehistoric monuments of Cornwall seems destined apparently to be the last ; and Sir John Lubbock's Act, splendidly intentioned and splendidly fought for, remains almost a dead letter ; and nothing but protests are launched

at the heads of offenders like Lord Grimthorpe. A very good piece of work has been accomplished by Mr. Payne in the preparation of his Archæological Map of Kent, but its publication is buried in *Archæologia*, instead of being published as a handbook, which should be a handy guide for others, who would be prepared to follow Mr. Payne's lead and gradually complete, county by county, the whole of England. What we want as much as anything, is an Archæological Handbook, something similar to the *Anthropological Notes and Queries* published by the British Association. And we should insist above all things that a training is needed in matters archæological as in other branches of study. How can we expect a Government to take up the question of archæological monuments if more genuine co-operation is not arrived at by those who profess to be chiefly interested? Thousands of pounds are wasted yearly in printing papers on subjects of very minor interest or of very inadequate treatment, and yet very little is done to bring about a recognition of archæology as a study which our schools might properly take up.

Then as to the study of comparative archæology, very little if anything is being done in this country. In the meantime destruction is going on under the eyes of English officials abroad in the countries under our dominion, and opportunities are vanishing for utilising those vast and unequalled sources of archæological information in India. The depredations of contractors in Britain are too frequent, as, for instance, the Antonine Wall in Scotland, reported in our recent issue, but in India they are twice as great. The amount of puerile mischief which is done is almost inconceivable, and yet there is not enough "union" in the country to make legislators believe and know that archæologists are a power, that they have definite aims, and their claims for assistance at the hands of the Government are supported not by a lukewarm few, but by a vigorous and powerful body working together in constant and friendly union for one object.

We have taken this occasion to mention these few points because they illustrate one of the reasons which animated the promoters of this journal, and which they hoped had been attained when Dr. Cox took up the subject so vigorously and so well, but to be ultimately defeated, it appears to us, in half his aims and in half the requirements of the case. No doubt we have advocated very advanced reforms in archæological administration; no doubt there are many and great difficulties in the way; perhaps the present may be a beginning only which will lead up to other and

better things later on. Still, we think more might have been done, and we regret that it was not at least attempted.

If the proposed Union should turn out a greater success than we dare hope for, there is yet time for an alteration in its constitution, and this may come about as time progresses and as the movement develops. Under the able organisation of the Secretary of the Society of Antiquaries, indeed, we may hope for some good results in the limited spheres open to the Union. But until some financial arrangements are made, whereby the Archæological Union is enabled to support itself and do work of its own in the matter of management and organisation, we cannot hope for anything of striking moment to take place. Many of us would have wished for the establishment of a body which would have ultimately been able to take over any power which Government might be prepared to place in the hands of conservators of ancient monuments ; and many of us would have liked to have seen the Society of Antiquaries at the head of a Union which would have wielded real powers in the country.

REVIEW.

THE CISTERCIAN ABBEY OF STRATA FLORIDA; ITS HISTORY, AND AN ACCOUNT OF THE RECENT EXCAVATIONS MADE ON ITS SITE. By STEPHEN W. WILLIAMS, F.R.I.B.A. (London, Whiting & Co., 1889.)

THE publication of this handsome volume speaks well for the interest felt for mediæval archæology in South Wales. It is well printed, excellently illustrated, strongly bound, and very moderate in its price, especially to subscribers. It consists, as the title tells us, of two parts, a history of the abbey of Strata Florida and an account of the recent excavations there. It will be convenient to deal with the last part first, both because it was his interest in the excavations that led Mr. Williams on to the study of the history of the abbey, and because that part of the work in which the architect and not the historian speaks, is incomparably the more important.

Mr. Stephen Williams is an architect living at Rhayader, a little town cut off by many miles of bleak moors from the one Norman arch and the great mounds of stone and *débris* that until lately marked the site of perhaps the best known abbey in South Wales. Many years ago he conceived the desire of finding out what lay below these heaps, and since 1887 he has been actively engaged in a systematic exploration of the whole of the precincts. He soon succeeded in laying bare the ground plan of the church. The Cambrian Archæological Association interested itself in his work, and last summer more than twenty men were employed in the excavations. When funds fell short, a local committee was instituted to which the ruins were handed over. This body has showed a very praiseworthy zeal, not really harmed by its desire to make a new show-place for visitors to the neighbouring watering-place of Aberystwith. It has done particularly good work in protecting the remains from the chances of damage or mischief. It well deserves to receive liberal subscriptions to carry on its good work during the ensuing summer. From first to last, however, the direction has been in Mr. Williams' hands. His energy and enthusiasm have brought the work to a successful result. It is impossible to praise them too highly.

What has been found, Mr. Williams tells us in his present book.

He has ascertained that the church was built at the time when Norman architecture was changing into Gothic. Except the unique western arch, which still remains above ground, all the windows seem to have been pointed. As the church was opened in 1203, it would probably be one of the earliest buildings in Wales that marked the transition to the new style. It was also one of the largest. As Mr. Williams points out, it was five feet longer than the famous cathedral at St. David's, and only surpassed in length by the unfinished minster at Cwmhir. While thus bringing back to light the foundations of church and chapter-house, Mr. Williams found a large number of most interesting details, all of which are minutely described in the text, and faithfully represented in the excellent illustrations with which the book is so plentifully interspersed. Among these the interesting and beautiful fourteenth century paving of the chapels may be particularly noticed, "the finest series of tile pavements to be seen in any ruined abbey in England or Wales." But for such details readers must go to the book itself and to the careful drawings of Mr. Telfer Smith, the clerk of the works. All that can be suggested in the way of criticism is that perhaps Mr. Williams makes rather too much of the "distinctively Celtic train of thought" shown in "the details of the carving", and treads too firmly on doubtful ground when he says that the "style of Strata Florida is quite different in many respects from the ordinary English style and that which the Anglo-Norman lords of Glamorgan and Pembroke imported from Somersetshire into South Wales", in order to prove that it is "Welsh in the strictest sense". But on such points as the limits of local adaptation of mediæval architecture, everyone can think as he pleases, and Mr. Williams can quote distinguished authority for what he has said. Mr. Williams has made here a real contribution to our archæological knowledge, and has done his work with great thoroughness, zeal, and efficiency.

Interest in the building very properly led Mr. Williams to take an interest in the history of the abbey, and more than half of his book is devoted to strictly historical work. Three long chapters tell us the story of the founders of the abbey; another gives a detailed history of the abbey and description of its possessions. In an appendix of more than a hundred pages the chief documents bearing on the history of the abbey are collected from various sources.

It is unfortunately impossible to speak in the same terms of the historical as of the architectural part of the book. We may

praise Mr. Williams' zeal and industry, his general accuracy in following the curiously varied authorities that he has chosen, and in particular we may thank him warmly for the mass of matter brought conveniently together in the Appendix, which includes nearly all the accessible materials for his task. They will save future workers on the subject a great deal of trouble. Very interesting, in particular, are the documents dealing with the last age of the monastery, such as the remarkable case of coining by a monk, investigated by Bishop Rowland Lee and the Commissioners of the Marches, and the temporary exemption of the abbey from the fate of the smaller monasteries, which postponed its final fall a few years.

Mr. Williams' own compilation from these materials is of less value. It is a pity that he has brought down the standard of an otherwise most useful work by publishing it at all. It is no discredit to him that he is not a trained student of history and archæology. But he has chosen to write upon these subjects, and candour compels me to say that he has not written well. His historical chapters are marred by many of the faults which are unfortunately only too common among the older school of English local antiquaries. He hardly seems to grasp the difference between an original authority and a modern book, and among modern books, between works of the type of Freeman's *Norman Conquest* and works of the type of Lloyd's *History of Powys Fadog*. He quotes them all alike as of equal value. He has little criticism, little sense of proportion, little general historical culture. A great deal that he says has no bearing whatever on the history and fortunes of the abbey. He has, however, worked at his subjects carefully, and has grasped fairly well that the Cistercian movement is part of a great whole. This is a great advance over some Welsh antiquaries.

Mr. Williams holds the absurd notion that Rhys ab Tewdwr, who died in 1093, founded a Cistercian monastery, though his only authority is an ambiguous statement of the fifteenth century poet, Lewis Glyn Cothi, and the positive assertion of Leland, who of course lived a century later. But he seeks to minimise the anachronism by relying on a mistaken statement of Camden that Strata Florida belonged to the Cluniac order, from which he rashly infers, without a tittle of evidence, except the presence of some older and rougher stones in the ruins, that Rhys founded a Cluniac monastery at a site still called "Yr hen fynachlog" (the old monastery), which was afterwards transferred to its present site and made

Cistercian by Rhys ab Gruffydd. But the old monastery is an unverified hypothesis, and, if it ever existed, would probably be only the original site of the Cistercian house, before the monks moved to their new buildings early in the thirteenth certury. However strong may be the weight of "local tradition", it will not take us back to the eleventh century, though Mr. Williams considers that a certain "hale and hearty Mr. John Jones of Pontrhydfendigaid, now seventy-four years old", who "remembers all the traditions his grandmother told him when a child", an authority for the road along which the stone for the twelfth century church was hauled from the seaside to Strata Florida, and for some things even more wonderful.

There is no doubt about the foundation of Strata Florida. The date is given in the *Brut y Tywysogion* as 1164. Who was the founder, that is, who gave the land and subsistence for the first monks, is a less important question. Mr. Willis-Bund has lately argued with much ingenuity that the founder was one of the great Norman house of Clare, who had received a grant of the neighbouring district. But there is no positive evidence for this, and the exact power of the Clares in northern Ceredigion is rather doubtful at the time. The ordinary attribution of the foundation to Rhys ab Gruffydd is practically borne out by contemporary, or almost contemporary, evidence. And the original Cistercian monks were too poor to make the question as to who "founded" each house of any importance. The inspiration of the Holy Spirit was, the chronicler tells us, what took them to the dismal region of the Upper Teifi. What matters whether Norman lord or Welsh prince gave the land? The Cistercian movement was independent of race and nation. Welsh princes and Norman marchers vied in their eagerness to introduce the new order. Who founded Clairvaux or Fountains? The real impulse was with Bernard or with the seceding precisions from St. Mary's, York.

In conclusion, a few of Mr. Williams' mistakes must be collected. He constantly uses the so-called *Gwentian Brut* in preference to the infinitely more authentic *Brut* in the Rolls Series, and has plainly not grasped the relative value of the chronicles. He thinks apparently that Welsh counties always existed, and talks of Cardiganshire, and even of Breconshire and Monmouthshire, in the twelfth century. Strata Florida was not "munificently endowed" (p. 3), as it had less than £200 a year at the dissolution. Bleddyn's father (pp. 5 and 6) was "Cynfyn", not "Cynfan". The "Mawddwy banditti" (p. 6) were several centuries removed from Owain ab

Cadwgan. It is very wrong to talk of Earls of Desmond (p. 6) in the eleventh century. Caradoc of Llancarfan (p. 7) certainly did not write the *Gwentian Brut*, as he probably died before 1147. Nest was not the mother of Robert Earl of Gloucester (p. 13), and the "authorities" that say that she was are not good ones. Richard de Belmeis, Bishop of London, was not "warden of the Marches of Wales" (p. 15), a much later office. Rhys ab Tewdwr probably died in 1093, not 1091 (p. 24). It is a pity to quote Mr. Laws' recent book for a story (p. 35) which really comes from so well known a source as Giraldus' *Itinerarium Kambriae* (pp. 79-80, Rolls ed.). Similarly, on p. 36, the story that Gruffydd ab Rhys was poisoned by his wife, comes from the Continuation of Florence of Worcester (ii, 98, Eng. Hist. Soc.). But the Continuation mentions no name, so it is doubtless some other wife than Gwenllian, the heroine of Kidwelly. On p. 38 the reference to Florence, or rather to his Continuator, should be to p. 98, not 88. On p. 66 "Viscount of Gloucester" should of course be "Sheriff". Rhys ab Gruffydd is rather ludicrously described on p. 69 as "all powerful". The *Annales Cambriae*, p. 98, were not published by the "Record Commission", which had come to an end many years before 1860. A very little care would have shown Mr. Williams that not the "Annals" as they stand in Ab Ithel's wretched edition, but only one particular MS. (MS. A), is "the oldest chronicle of Wales we possess". As that precious MS. was written in the tenth century, it certainly was not written at Strata Florida. Mr. Bridgeman, whose words are quoted on p. 117, could have found "whether or not Gruffydd obeyed his summons" in *Hoveden*, iv, 142 (ed. Stubbs). Mr. Williams has given us a copious but hardly a scientific index; for example, "Cymmrodor" and "hen Fynachlog" are indexed under the definite article "Y" and "Yr", and "Llewelyn" under its proper head and also under "Leulinus".

It is fair to add that many of these slips are made by the modern guides that Mr. Williams unluckily follows. If he had gone to the original sources for himself, and taken a little more time in his novel work, we should have had no need to comment adversely on what is in many ways such a meritorious, interesting, and important book.

T. F. Tout.

CORRESPONDENCE.

PAYMENT BY WEIGHT OR TALE, 1300-1500.

(*Supra, p.* 20.)

Professor Rogers' theory that after the depreciation of the currency payments were extensively made by weight, and not by tale, seems very void of foundation. If payment by weight had been the rule, instead of "tellers" of the Exchequer (*Numeratores*), we should have had "weighers" of the Exchequer (*Ponderatores*), but no such officials are to be found on the staff of the Treasury from 1300 to 1500. The whole system of payments by tallies or drafts was clearly based on the current coin of the time, taken by tale, as might easily be proved, especially in connection with the Customs accounts. But I can supply Mr. Seebohm with the facts of one transaction, which to my mind run very strongly against the theory of payment by weight. I refer to the lowering of the currency in 1464. Before that, the silver penny had contained 15 grains troy of silver, and a pound Tower of the metal made 360 pennies or 30 shillings. Under the new system, the penny was to be reduced to 12 grains; so that 450 pennies, equal to 37*s.* 6*d.*, would be struck from the pound Tower. The charge for coining was also raised: hitherto, the charge had been one shilling on the pound; the merchant who brought a pound of silver to the Mint receiving back only 29 shillings out of the 30. Now the charge was to be raised to 4*s.* 6*d.*; but as the merchant would get 33 shillings for his pound of silver—four shillings more than he got before—the Government officials were able to represent the transaction as one beneficial both to king and subject alike. But where, may I ask, would the gain of the four shillings in the pound be, if payments had to be made by weight, and not by tale?

I believe that the main, if not the sole, object of the change of currency to the bronze was the profit to be made by recoining all the money in the realm; and that the currency was lowered partly because that would increase the profit, by enabling a higher rate to be charged—partly, perhaps, because the officers of the Mint may have been wise enough to know that if the currency was lowered, the holders of all the old coin would be forced to bring it in to be converted, or else they would lose the difference in value between the old and the new coins. This of course would not be the case if payments were made by weight and not by tale. Anyhow, Edward IV netted over £15,000 by the operation—a satisfactory sum for a king whose regular income at the time was only from £60,000 to £65,000 a year. For the evidence and further details, I must refer to the article in the *Antiquary* (vol. xvi, 187, 241).

With respect to the rise or fall in value of silver, I do not know whether any evidence is to be derived from the change in the currency except this, that relatively to gold silver fell. Before the change, the ratio in value of gold to silver was as 1 to $11\frac{1}{9}$; the pound Tower of gold yielding 50 nobles of 108 grains each, and worth 6*s.* 8*d.* An attempt was made to force these nobles to pass for 8*s.* 4*d.* of the new currency. This having failed, a new gold currency was issued, the pound weight being struck into 45 "rose nobles" of 120 grains each, and worth 10*s.* of the new silver, thus bringing the ratio of gold to silver up to 1 to 12.

J. H. Ramsay.

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RECENT ARCHÆOLOGICAL RESEARCH.

No. IV.—GREEK ARCHÆOLOGY IN MODERN TIMES.

L. von Sybel, *Weltgeschichte der Kunst bis zur Erbauung der Sophien-kirche*, Marburg, 1888 ; and in *Deutsche Rundschau*, 1888, p. 481.
Perrot et Chipiez, *Histoire de l'Art dans l'antiquité*, Paris, vol. i (1882), *L'Égypte ;* vol. ii (1884), *Chaldée et Assyrie ;* vol. iii (1885), *Phénicie, Cypre;* vol. iv, in progress.
A. Holm, *Griechische Geschichte von ihrem Ursprunge bis zum Untergange des Selbständigheit des griechischen Volkes*, Berlin, 1886, in progress.
A. Michaelis, *Ancient Marbles in Great Britain*, Cambridge, 1882.
H. Brunn, *Denkmäler Griechischer und Römischer Sculptur.*
G. Loeschcke und A. Furtwaengler, *Mykenische Vasen*, with *Atlas*, Berlin, 1882.
Museo Italiano di Antichita Classica, vol. ii, puntata iii, 1888 ; album of plates.
H. Schliemann, *Mycenae*, 1878 ; *Ilios*, 1880 ; *Tiryns*, 1886. London.
O. Montelius, *The Civilisation of Sweden in Heathen Times.* London, 1888.

IT is now rather more than a century since the father of archæology issued his great work, and still his countrymen celebrate each ninth of December with an enthusiasm which most of us, perhaps, can hardly understand in connection with the birthday of a private individual. Winckelmann is justly credited with having opened up for the world of science a new sphere of activity, and Greek archæology is even now moving on the broad lines laid down by his master mind. We in England, though Englishmen were the first nation who took up seriously the study of Greek art, have hardly even yet, with our conservative tendencies, learnt to regard this study on the level of an exact science. Some of us take the standpoint of regarding it as a useful adjunct to illustrate, and even very occasionally to explain, the classics. Others, while professedly they pursue this study for itself, are apt to take too much the narrow view ; dazzled with the glories of the Periklean age, they take the little world of Hellas for the universe of Art, and are blind to the significance of its relations with that larger world, the

art-history of all time. They regard Greek art as a phenomenon of the last few centuries before our era, a lightning-flash which burnt for an instant and was gone; it kindled a fire indeed which shines forth among men for ever, but whence it came and whither it goeth they care not a whit.

The larger view of Greek archæology is the view neither of the specialist nor of the dilettante; it is that in which the object aimed at is equally indeed the search after truth, but on a larger horizon: to study Greek art and life from without as well as from within; to seek for the great principles which underlie perfection, and to neglect nothing which may contribute a link in the long chain of evidence, whether it be the potsherd of a Pueblo Indian or the weapon of a South Sea Islander; in short, to place Greek art in its true position among the nations; and we may be sure that thus it will not lose, but rather gain infinitely, by the association.

In the century that has passed away this point of view has been gradually but surely making itself clear; but it is principally within the last ten years that anything like a full supply of material has been made available. It is the object of the present paper to try and show wherein the past decade has been an epoch-making period, to define our present standpoint, and in some measure to cast a horoscope of investigation for the future.

From this point of view, the part of Greek archæology which must specially attract our attention is precisely that which leaves off where contemporary Greek written record begins. In tracing the origins of Greek art and literature we are necessarily following up the origin of the national life and spirit, and for this our only material lies in the traditions and actual remains of the people, and especially in the comparison with those of other nations. The problems which must confront us are manifold, and the difficulties many: not the least of the difficulties at present is the uncertainty of ancient chronology and the insufficiency of ascertained dates, not merely of one nation of antiquity, but of all. The whole structure of ancient art history is at present more or less hypothetical; the waters of science are flowing, sometimes backward, but mainly forward. A great German writer has compared research to the rising waters of a lake, of which the theories advanced are like the threads of water, ever pushing forward; sometimes the ground they cover reappears again in the backward flow, but more often the advance guard is followed up by the main body of the flood. If the backward flow is sometimes the more apparent, we may at least console ourselves with the famous choice of Lessing: "Pure

truth, O Lord, is for Thee alone; give me the search for truth, and I will be content with that."

It has been said that Winckelmann was the founder of a new science. In order to realise this, let us see for a moment what was the condition of public taste and individual knowledge as to ancient works of art before he appeared on the scene. The literature of Greece had, it is true, found its way with the spread of printing to all the great seats of learning and education by the eighteenth century; and the great Italian cities had their living remains of antiquity, which had either been saved from the wreck of centuries, or were then being slowly recovered from the soil. Young Englishmen of fashion must needs do the grand tour for themselves, in order to finish their education; most of them came back with a romantic dilettante sort of esteem for ancient art, which at the best taught them to admire a "monstrous fine statue" when they saw or thought they saw one; their enthusiasm found expression in one of two ways: either they wrote a diary, in which, sitting on the Akropolis, they would moralise on the past, or they acquired a taste for possessing a gallery of sculpture for their castle in the shire, or mansion in Mayfair. Michaelis' work gives an excellent account of these private collections as they are to-day; and the preface tells us how they were formed, chiefly through the skilled medium of the Nollekens, the Jenkins, or other dealer of the day. A glance at Michaelis' book will give a very fair idea of what the materials were on which Winckelmann had to work, for the private English collections of the eighteenth century probably represent a fair estimate of what the Italian museums contained when he was working among them. They were, in fact, for the most part, works of varying merit of the Græco-Roman period; that is to say, copies made to order for the decoration of the villa of the patrician Roman of antiquity. In the general ignorance of style there lay a grand opportunity for the restorer's fancy; and the Cavaceppi of that day acquired then a dangerous skill, which their descendants of to-day have never wholly lost, unfortunately for us. Of Greek work, pure and simple, little or nothing was known. In the fifteenth century, Ciriaco, the mediæval Pausanias of Ancona, had studied the relics of Greek art, when Greece was under Italian princes; and in 1675 Spon and Wheler made their journey to Greece and the Levant, an exploration in a country at that time almost unknown. Under Turkish rule, however, the task had become more and more difficult. Such collections as were made were, like that of Lord Arundel, practically

inaccessible to the German scholar; probably, as "President of Antiquities" in Rome, he had not much sympathy with the "charcoal souls", as he called them, of many of the British travellers in search of antiquities. The first of them who brought home rich booty from Greece itself was Sir Richard Worsley (1751-1805), but his *Museum Worsleyanum* was not published till 1798. The travels of Dodwell (1767-1832), Gell (1777-1836), and Leake (1777-1860) were not yet; it was only in the beginning of this century that the French tenure of Italy having made that country difficult for English travellers, their attention was turned to Greece; while simultaneously the brilliant genius of Porson had given a strong Greek bent to the study of ancient literature in our own country. As an evidence of the condition of taste in ancient art in England, we have Payne Knight's introduction to the *Specimens of Ancient Sculpture* (1809), purporting to be "a glance over the development of ancient art". It was written by a man who led the opposition to Lord Elgin, which nearly lost us the Parthenon marbles: "You have lost your labour, my Lord Elgin; your marbles are over-rated; they are not Greek, they are Roman of the time of Hadrian."

Under such circumstances as these, it is all the more remarkable that out of his scanty and ill-assorted materials Winckelmann should have been able to refine the few grains of the true gold that he was seeking, to formulate certain broad laws of style, and to mark out, as it were, the ground-plan upon which the great structure of our modern knowledge of Greek art has been raised. His great work, which traces in a universal aspect the spread of art from nation to nation, treats of the art of the Egyptians, Phœnicians, and Persians: from the Egyptians it passed to the Etruscans, and thence to the Greeks; but throughout we are made to feel that the other nations are but a setting, as it were, for the central brilliancy of Greece. For the first time Greek art had been intimately comprehended as an actual organic creation, and accurately tested in its national and historical relations.

As the first consequence of Winckelmann's work, his successors confined their attention to histories of Greek art alone. Meyer's work (in 1823), a *History of Greek Art, from the commencement to the highest bloom*, is an enlargement of this part of Winckelmann's subject, based upon the same lines. Hirt (1833), in a similar work, notes that Greek literature gives us artists' names only from the seventh century B.C. downwards. He therefore concludes for the complete dependence of the art of Greece on that of Egypt, which

had been newly opened up to the Greeks in the seventh century by Psammetichus. Thiersch's work, which came soon after, is valuable as being the first which called attention to the importance of the so-called "Hero time" in Greece; appreciating the importance of the works of art described in the *Epos*, he sets the commencement of Greek art at five centuries earlier than his predecessor. During these five centuries art was in a crystallised, lifeless condition, to account for which he assumes hieratic influence of a similar tendency to that which is observed in Egyptian art. K. O. Müller made an important stride in his *Handbook of Archæology*, in which the peoples of the East are relegated to the position of being a mere "Anhang" to the Greeks. Like Thiersch, he goes back to the early date for his beginning of art; but whereas Thiersch had relied on literature only, Müller uses as his most weighty argument the evidence of the actual monuments; for him the remains of Tiryns, Mykenæ, and Orchomenos are remains of Greek culture dating from the end of the second thousand years B.C. The gulf between this advanced date and the bloom of art is explained from a point of view which we now see to be in some measure the right one: in the period before the seventh century B.C., art as an independent activity, represented by names of known artists, did not yet exist; its place was filled by an extensive circulation of art craft and art handiwork, which from the conditions of the case were less subject to broad laws of development.

In all these histories of art there is one main point, which at once strikes the reader; each of the authors feels the importance of it, and each offers a different solution: the problem is that of the beginnings of Greek art before the the seventh century. Winckelmann had taken the process of its first development as that of a germ passed geographically from the Egyptians to the Etruscans, and so on to Greece; his mistake lay in overrating the influence of the Etruscans, a mistake which was, after all, perfectly natural to expect, when we remember that almost all the considerable finds of early art closely allied to Greek had in his time been made in Etruria, and all those vases, for instance, which we now know as Greek, were then considered as Etruscan. But when once the principle was established that the earliest recorded art of Greece was the outcome of centuries of events which to the Greeks themselves were wrapped in obscurity, this mysterious past was the problem which was at once the most interesting and the most difficult. It was most difficult, in the utter absence of all authentic literary records, and the comparative paucity of monuments which

could, like the walls of Tiryns "which the Cyclopes built for king Proitos", be with certainty referred to this mythical past.

Meanwhile, however, much was happening which was destined to influence and to widen the range of archæology: a new and more extensive field was opening in the East; the re-discovery of Egypt by the French expedition under Bonaparte was shortly followed by the opening up of the buried cities of Mesopotamia; and as day after day new monuments were multiplying, and the methods of reading their secrets were becoming more certain, knowledge gradually accumulated about those Empires which were already hoary in the ages before Greek art, as then known, was yet in its infancy. During the long peace which followed the great wars of the Empire, the barriers were removed which had confined research to the individual and isolated effort of one nation or another; science was finding a wider and more cosmopolitan footing; and from this time forward there was inaugurated a busy period of toil in every direction; travellers and artists, savants and philologists, have ever since worked in concert: Champollion found the key to the hieroglyphics, which gave meaning and historical value to the flood of Egyptian monuments which have ever since been ceaselessly pouring in; the Mesopotamian kingdoms of Tigris and Euphrates, known hitherto only in the names of a few stray kings, were thrown open by Botta and Layard, and revealed in marvellous completeness and preservation: while their inscriptions did not long withhold their secrets. Out of this mass of material we are only now gradually gaining a definite system of order and arrangement: much still remains to be done before we can be in a position to do more than trace in a general way the broad lines of their development.

This much at any rate was certain: that in primitive times two main centres of culture had existed: the one in the valley of the Nile, whose monuments went back to the earliest dawn of civilisation; the other, younger, it is true, but still infinitely remote, in Chaldæa; and further, that Syria formed, as it were, the bridge of peoples across which the interchanging ideas and products of these two passed and repassed. For Greek archæology, however, the main point still remained at issue, and, indeed, has only within the last few years been grappled with seriously, and with any likelihood of success. What direction had these Eastern streams of culture followed, and by what medium had they come to the Western shores of the Mediterranean before they influenced the still barbarous tribes, ancestors of the Greeks and Romans?

It was evident that the question was again assuming an interest which involves the universal history of the nations: Winckelmann had urged very strongly, against the claimants for the Egyptian origin of Greek art, the counter-claims of the Phœnicians; the Phœnicians had beyond a doubt communicated to the Greeks the elements of their alphabet, and why not the elements of their art? This idea was by his successors ridden to death, so much so that in 1846 Gerhard found it necessary to publish as a counterblast his *Ueber die Kunst der Phönicier;* in this work due attention was called to the art of Asia Minor, that natural bridge between the peoples of East and West, and of which the explorations of Texier and Fellows were showing that it, too, was rich in monuments which testified to its ancient art and culture. As an outcome of this extended view of art history, Julius Braun published in 1856 his *Geschichte der Kunst in ihrem Entwicklungsgange alle Völker der alten Welt,* but this book was too exclusively a return to the old lines of the "Stammbautheorie", a position which fails to grasp the many complex and involved paths by which the characteristics of one nation with another are communicated and exchanged.

The same geographical order had been followed both by Kugler and by Lubke in their histories of 1841 and 1860, respectively: the former work is otherwise interesting as being the starting point of a new development in art history: the author saw dimly what is now becoming more clear, and endeavoured to give a more extended sphere to the history of art. Winckelmann had been the first to lay down the principle that the art of a nation is born, grows, and decays with the society in which it flourishes, that it has in fact a history: Kugler endeavoured to show the importance of comparative study of it: that it is capable of treatment on the broad level of the world-history of mankind: and so he begins with the so-called "Celtic" monuments, and treats Mexico and Yucatan before he arrives at Egypt. Of these works the scale is too small to admit of a really sufficient treatment: entire antiquity is dismissed in a couple of hundred pages; and the same is true of Schnaase (1842) in a less degree: his first two volumes are devoted to the East and the classic peoples of antiquity; but, after all, the true worth of this book lies in its grasp of mediæval and later art. As far as antiquity alone is concerned, the book which is now being issued is perhaps of all others the most successful, as it is the boldest attempt at a complete history of ancient art: the *Histoire de l'Art dans l'Antiquité*

of MM. Perrot and Chipiez (1882, in progress) takes the history of the nations volume by volume, and may be said to be complete as far as the level of present knowledge goes: the writer has a singular grasp of the various manifestations of the multiple genius of the man of the past: all the various aspects of commercial and artistic, historical and social, are carefully assorted with a lucidity which is well *au courant* with the march of discovery: and yet one feels that the different members of the subject are united in the main idea of the final supremacy of Greece and Rome.

This brief review of the historical literature of art will serve to indicate my point: that the study of Greek archæology has been gradually growing into the wider field which has only in the last few years been fully opening out for it: the gradual development of the last century had prepared it for the series of discoveries which, beginning only little more than ten years ago, have succeeded each other with such extraordinary rapidity, and have thrown such a brilliant light on the dark periods before Greek literary records had commenced. The two great land-marks in the history of the world's culture, as a recent writer has remarked, are the Alexandrian age, and the age which we may in its widest sense call the age of Mykenæ. These two periods are alike in this, that in each for a moment, as it were, East and West had joined hands, united in the same purpose: they were two great tidal waves of time, of which the vibrations have not yet come to an end: both were of the deepest significance for Greek art, for in the one it was born, in the other it completed its course of victory over East and West. The forces which had been individually at work, each in its own sphere, were by an overpowering political agency set moving together, in the first period in a Westerly, in the second in an Easterly direction. In the second thousand years B.C. the moving force was the power of Egypt, just then at its zenith of expansion: when Asia Minor and Hellas were both brought into intimate intercourse with Egypt, both commercially and in connection with their forms of art. The age which followed the conquests of Alexander, significantly described as the Hellenistic or Alexandrian age, has as yet given little but literary remains to the modern times with which it was so much in sympathy. Pergamon and Pompeii have told us something, and from coins and inscriptions much more is gradually being gleaned; archæology is here the chief handmaid of history in its widest sense, that history which deals with mankind in the complexity of his relations, social and religious, as well as political. This is, in fact,

one of the great changes which in more recent times has grown up, and is still growing, in the old order of Greek archæology; true history is not merely the development of institutions and the public affairs of state: it is that which regards society in general as its function, and neglects no aspect, not the humblest surroundings which may illustrate this complex organism.

And in this connection it is interesting to see in what point of view the historians of Greece of our time have regarded archæology. Grote may be said to absolutely ignore it: he had neither the knowledge of it, nor yet that sentiment which alone can place the writer in full sympathy with his subject: to us now it is difficult to imagine anyone writing of the Greeks who has not grasped that inner life which is, after all, mirrored, not in their public documents, not even in their literature, so much as in the terra-cottas and bronzes of their home-life and religion. E. Curtius had indeed this sympathy with his subject, but he had not access to the wealth of material which has grown up since his time: he stands on the point of transition between the old style and the new as represented in Duncker and Holm. Holm's history, which is still in progress, is perhaps the nearest approach to a full use of archæological material for history which has yet been seen; but it is in too small a compass to give an adequate representation of the strides made in modern archæology. And there is another great difficulty which encounters the historian in the swiftly flowing tide of science: it is difficult, no doubt, to keep pace with the onward stream; but surely that is no reason why we should step out of it altogether, as one recent historian has done. Dr. Abbott's history is in this sense a monument of academic conservatism; "The evidence of monuments, unless illustrated or confirmed by written documents, is of small service to the historian"; and again, "Homer is of little or no value as evidence of the early civilisation of Hellas"; and so the remains at Hissarlik, Mykenæ, and Tiryns, the wealth of evidence contained in the early movements of cults and myths, the entire picture of the epos, are all practically discarded as worthless, being unrelated to anything that we know of historical Greece!

What we now are seeing more and more every day is that every scrap of evidence is valuable: the potsherd trodden under foot on a deserted Ægæan islet may be the only remaining indication of a great historical fact: the song sung by a sponge-diver's wife to her child may give us the clue to a lost myth, which in turn is evidence of an early migration of peoples. Primitive customs

and beliefs die hard in a mountainous country; often even the racial character remains the same; we have had an example of this in the recent account of the Austrian expedition to Asia Minor; the second volume of the *Reisen in Sudwestlichen Klein-asien* is in a great measure devoted to Luschau's ethnological comparison of the skulls, according to which the types of the people of Lycia from antiquity to the present day have remained unaltered; the name only has changed. Mr. Bent's papers on Greek myths and folk-lore are evidence of what has been done, and of how much may still remain to do in this direction. As one instance among many, we may quote a curious case in which a modern survival of an ancient custom has served to explain a much disputed passage in Greek literature. In the *Classical Review* for 1888, p. 180, Mr. W. R. Paton refers to the passage in Pindar, *Isthm.* ii, 10, in which the phrase *ἀργυρωθεῖσαι πρόσωπα* has never been satisfactorily explained. "Terpsichore had not to silver the faces of her songs in order to find buyers"; Pindar spoke of the *ἀοιδαί* as persons ("songs" here = singers), and it was difficult to conceive how gilding the faces of singers could have made them more attractive. Mr. Paton explains it by a custom which is still prevalent in Greece: "At the open-air festivals the musician stands in the centre of the circle of dancers; only silver coins—no paper or copper—may be given him in payment of his services. When he receives them he does not put them by, but sticks them on his face, no doubt *in order to attract further contributions.* The exertions by which he has earned them ensure their adhesion, if the weather also be fairly warm." On p. 261, *ibid.*, Mr. Fraser calls attention to the analogous instances of this custom in Lucian, *Philopseudes*, 20, and as recorded in Newton's *Travels*, ii, p. 4, who saw in Lesbos a gold coin stuck on the face of the Panagia, and was told that it was a native offering for recovery from sickness; also, to go farther afield, the spinning festival in the distant island of Celebes, at which a man places a silver coin on the brow of a girl who pleases him: if the coin is not returned, he knows that his suit is accepted.

It is surely an obvious fact that the true historian must needs neglect nothing which will enable him to explore the deeper currents which underlie the political forces which it is his duty to chronicle; and this is nowhere more true than in the case of Greece. What, for instance, is Greek history but dry bones without her poetry, her religion, and her arts? It is not surprising that a writer like Dr. Abbott should find the significance of the Olympic

games "incredible, if it were not true". We should have thought it "incredible" that in our own days so determined a sceptic could still be found.

In this sense archæology is the handmaid of history in its widest form; and now that the different branches of archæological material are being every day more methodically and compactly grouped by the specialists there is no excuse for neglecting the use of them. It may be said that sculpture requires a special training and demands a history of its own; we have the histories of sculpture of Overbech and Murray, which supply in the fullest degree all that is necessary; while for the other branches of archæology we have books on vases, terra-cottas, coins, bronzes, and epigraphy by the score. For the past ten years has not only seen an extraordinary increase in the supply of fresh material, but it has brought about a cosmopolitan organisation which is the only final method: photographs, casts, and squeezes, being easy of communication, have rendered this possible; in the Δελτίον of the Greeks, the Italian *Notizie dei Scavi*, and in numerous notes in periodical literature we have the chronicles of new finds collected and arranged: and in the Berlin *Jahrbuch*, an admirable quarterly bibliography which seems to omit nothing. The tendency of to-day is towards a general classification of material wherever found; and the great corpus of inscriptions of Berlin for one branch, and Brunn's *Denkmäler* for another, are leading signs of this tendency.

It is not my purpose here to call attention so much to the discoveries which have so largely increased our knowledge of the historic Greeks within recent years; it is sufficient merely to mention the names of Olympia, Pergamon, Nunkratis, and, most recent of all, the diggings on the Akropolis, which have resulted in giving us so rich a picture of Athens under the Peisistratidæ. It is a sign of the times that the two official archæological publications of Athens, the Δελτίον and the Ἐφημερίς, are on a level with the best European work, both as judged from an artistic and a literary point of view. It is rather in the revelations of the prehistoric ages that our past ten years have been a real awakening.

The subject of the earliest dawn of art in Greece is one that involves problems for the ethnologist and philologist as well as the student of archæology. We cannot believe with Duncker that the Pelasgi, Achæans, and Hellenes are merely names which indicate three stages in the development of one Hellenic people. Philology teaches us that their language contains elements which must have been at one time grafted upon it from an external

source: anthropology teaches us to recognise the elements of a barbarous past; and if we examine the earliest traces of art and handicraft, we shall find an analogous process obtaining there also. Though we cannot believe that Greek art was a spontaneous outgrowth of the Ægean archipelago, we have reasonable hope at least of tracing the antecedents of the individual originality of the Greek genius: we may cheerfully recognise to the full the indebtedness of the Greeks to the Orient in cult and language, type and technique, and still find room to wonder at that inborn genius which graced everything that it touched.

The extant literary records of the Greek nation do not take us farther back than about the middle of the eighth century B.C.; in venturing into the dark ages before this period we have for our guidance only the traditions handed down by the Herodoti and Diodori of their history, the poems of Homer, and such evidence as is afforded by comparative history and philology, and by the antiquities themselves—the cradle-clothes, incunabula, of Greek art.

As regards the Greek historians, our own information is probably far wider, as our historical faculty is better developed, than theirs could be with its more limited range. We have learned to trust the evidence of mythology on certain broad lines which stand out through the network of beliefs to which the divisions of the Greek peoples into tribes and demes gave rise: and while we avoid the hopeless slough into which the "solar" heresy of Welcker and his school would lead us, we recognise the usefulness of this class of evidence when confirmed from other sources; that, for instance, the legendary contest of Athenaia and Poseidon at Athens dimly veils an historical truth in the contest of two races, of which the incoming race first overcame and finally absorbed the other. On this judicial aspect Holm's history takes its stand, and gives us an analysis of this form of evidence which is really excellent. The logographi and genealogists who give us the traditions in their earliest forms belong principally to a time when the idea of Hellas as a corporate whole was a moving cause, and when oral, and as yet unwritten, tradition was at work diluting more and more the real facts. From this, then, the principal result which we obtain is an occasional sidelight on the spirit of the times which they represent, and a record, more or less faithful, of the early movements and settlements of people.

In this sense the poems of Homer are of the greatest value, independently of the question of their unity or of their date in the present shape: poetry, with laws of form which tend to preserve it

from alteration, is not subject to the influences which affect the ordinary oral tradition, and thus we have in Homer a simple reflection of the national spirit of an age which is centuries more remote than the introduction of writing: we must always, however, bear in mind that the poet is imaginative both in his choice of ideas and in his language, and that we must therefore not expect with Schliemann to find an actual shield of Achilles or a head-dress of Helen.

If we examine, then, what the Greeks have told us concerning their earliest origin, it amounts briefly to this. We have an original stock represented by the legends connected with the name Pelasgi, a simple agricultural folk who have no god but Zeus; living, perhaps, as the story of the Leleges tells us, in communication with the coasts of Asia Minor from a remote period, and in point of origin connected by means of Thessaly with the Italiot races. As time goes on, modification takes place in two directions, by sea and by land. The natural formation of these countries suggests what in fact seems actually to have happened: on the one hand we have a country inland which is split up by mountainous tracts which make communication difficult: on the other hand we have an excellent seaboard, with chains of small islands forming the stepping-stones for the rudimentary navigators who would pass to and from Asia. And so, whereas the inland development seems to have taken place in a series of regular intervals, the peoples of the North pressing every now and again in great rushes Southward: from the sea on the other hand there came the successive powers, represented perhaps under the shadowy pictures of the "Karians", "Minos", and "Agamemnon".

Throughout the mass of legend and myth which encounters us, it seems clear that the cradle of Hellenic civilisation was really Asiatic. That is to say, while the coasts of Asia Minor were inhabited by the elements of the Hellenic race at least as early as Hellas itself, the earliest traces of culture are attributable to the Asiatic Greeks. Among all the theories propounded for the direction from which the Greek people first came, this much seems certain: that a great branch of an Aryan origin spread downwards from the north-east along the basin of the Ægæan at a time when, as the comparative philology and religions of the Italiot and Greek races (the latest members of the great Aryan family to separate) show, they were by no means an entirely rude people. A further movement took place by sea also from the East. Under these circumstances it is natural that we should look to the early nations of

Asia Minor who border on the Ægæan coast. At present our knowledge of these nations is very incomplete: it is only within quite recent times that a more extended and systematic study of these border lands of early culture has been attempted. Much has been done in recent years to throw light upon these seats of early dynasties, the kingdoms of Priam and of Tantalos, Lydia with its semi-Semitic population, Phrygia with its wealth of Aryan monuments: and it is in this direction that we have much cause for hope in future investigation.

Within the last ten years Professor Ramsay has made a special study of the antiquities of Phrygia, and has made a series of journeys through the country. The main results of his inquiry, as far as they concern the early history, are summed up in a recent paper in the *Hellenic Journal*, 1888, p. 350. The chief points which he claims to have established are as follows:

I. The Phrygian and Karian races are kindred tribes, closely allied in origin, and in the analogy of their art history, to the Greeks.

II. They came into Asia Minor across the Hellespont, and established themselves by right of conquest in the countries which bear their name.

III. The conquered race belonged to a stock which had spread over parts of Greece and Italy, as well as Asia Minor, and which has been traced by Pauli (*Eine vorgriechische Inschrift aus Lemnos*) through the use of local names ending in *-nda* and *sa*. "Its social system knew no true marriage, and traced descent through the mother: and in correspondence with this system they acknowledged a mother goddess and her son. The conquerors introduced the worship of a supreme God, the Father (Papas), and the Thunderer (Bronton). The two religions were amalgamated variously in the different parts of the country."

IV. A similar conquering caste of the same Phrygian stock had established itself in Lydia and Lycia, where the different surroundings tended to widen the breach.

V. The close relation with the Greeks of Cyme and Phocæa in the eighth century brought them in relation with the kings of Argos, which in Greece at that period was the most powerful state; and the Phrygian device of the Lion Gate of Mykenæ belongs to this period, 800-700 B.C.

In the general ignorance of early Greek art it is natural that an absorbing interest should attach to those sites which were connected by tradition with Homeric times; and Schliemann's dis-

coveries at Hissarlik, Mykenæ, and Tiryns were the first, as they must remain the most important, of all the discoveries which have followed them. Now that the first excitement of these events has passed, and now that they are no longer regarded as unique phenomena with which all history had nothing to compare, we are able in some measure to classify and arrange the results which they have taught us. Much of this is due to the observation that the remains of ancient culture lie as in a geological system, strata-like, one upon the other. This is specially the case in the 53 feet of *débris* at Hissarlik, even if we do not with Schliemann go so far as to differentiate the remains of seven distinct settlements which had successively replaced one another on this site. It is obvious that in a case like this the lowest stratum must be the earliest in point of time. From the lowest strata at Hissarlik have come the remains of a civilisation which to all appearance is the most primitive which has as yet been met with in Hellas or Italy: the pottery is here hand-made, the tools are of stone, principally obsidian, and the use of metals is only known in a very limited degree. Though there is no trace as yet of foreign importations, this population seems to have extended over a considerable area, from the Troad to Cyprus at any rate, but specially over the islands which adjoin the coast of Caria: the researches of Bent, Paton, and others in the Cyclades have produced results which prove so strong a similarity in the methods of burial and the character of the objects found, that there is little doubt that we see in them and in the earliest remains at Hissarlik the traces of one homogeneous civilisation: the pottery, though similar in type throughout, has certain local differences: we have therefore the existence established, in remote pre-Phœnician times, of a race united in customs and origin, who not only held a footing on both sides of the Archipelago, but established prosperous native industries where they had set foot.

The most developed of this class of antiquities are a series which were found under a stratum of lava in the island of Thera: this stratum was the result of an earthquake which is not recorded in history, but of which geologists fix the date at about 2000 years B.C. Now these Thera objects come as an intermediate stage of development between the periods of Hissarlik and of Mykenæ: they show the introduction in the pottery of ornament painted in a dull colour, in the place of ornament which had been hitherto moulded or incised. It is precisely this kind of pottery which is found in the lowest strata of the Mykenæ period.

We may therefore assume that, broadly speaking, these three sites, Hissarlik, Thera, Mykenæ, mark a corresponding chronological development: the date which we assign to the earliest must mainly depend on that which we obtain for the earliest Mykenæan objects.

In the Mykenæan sites, *i.e.*, Tiryns, Mykenæ, Orchomenos, Ialysos, etc., we have evidence of a long period of development, of which the pottery gives us the most instructive, as it is the fullest, material. The authors of *Mykenische Vasen* find that this pottery may be divided into two main groups: class A, the earlier, with ornament painted in dull colour; and class B, where the decoration is executed in a varnish or glazed colour. Now this shining varnish is the peculiar characteristic of Hellenic pottery alone, and of those dependent on it; whereas class A is met with in Egypt, Assyria, Moab, and other parts of the East. A similar distinction is traced in the character of the gold ornaments of Mykenæ, of which some have a decidedly Orientalizing style. The conclusion is, that in the earlier pottery and gold work we have the remains of a settlement of Orientalizing colonists, possibly Phœnicians.

In the architecture of Mykenæ we have valuable evidence, which seems so far to point in two directions. First of all there is the Phrygian influence, which has been already referred to, as exhibited in the heraldic device on the Lion Gate and in the "beehive" graves: these beehive graves, which as yet in a strict sense have only been found on Greek soil, reflect a system which, as Professor Adler has proved, was evolved out of the style of Phrygian architecture by a long process of evolution which extended over a large area. Although no beehive graves have as yet been found in Asia Minor, the elements are there, and came to Greece from thence, possibly with the immigration of rich Phrygian families, "such as we see reflected in the myth of Pelops, who came from the Hermos valley."

On the other hand, we have strong traces of Egyptian influence: the chiselled ceiling of Mykenæan Orchomenos gives us a pattern which is identical with that of a Theban tomb: the system of construction by a mixture of wooden tie-beams with the stone, as seen at Tiryns, is undoubtedly of Egyptian origin: and in the minor antiquities there is much which is identical with the arts and products of Egypt. Sometimes these are purely imported; but in some we seem to trace the influence of a hand which is certainly not Oriental, but which might well contain the germ of what we know as Greek. Chief among this class of Mykenæan antiquities is the peculiar fabric of the bronze inlaid swords. Of these swords,

which are ornamented with designs inlaid in gold and other metals, eight were found at Mykenæ and one at Thera. One typical scene among them is that of a river with fish, the papyrus nodding in the waters, and panther-like animals pursuing ducks along its banks. This is evidently a scene suggested by the Nile, but it is very different in spirit and composition from any Egyptian representation of that river: we seem to see a dramatic spirit and a feeling for composition and spirited drawing which was essentially the heritage of the Hellenic race. In that case, how comes it that a sword of exactly analogous fabric has been found in a tomb at Thebes? Brugsch, in *Egypt under the Pharaohs*, i, p. 253, describes the finding of the tomb of Queen Aahotep, who dates from the sixteenth century B.C. Her coffin was found by some Theban agriculturists in the ancient necropolis of No, and the contents are now in the Boulak museum. It was buried, not in a subterranean chamber, but in the earth itself, at a depth of one mètre. The cover of the coffin had the shape of a mummy and was gilt: here we have possibly an analogy to the system of burial, and to the gold masks in the pit graves at Mykenæ. Between the linen coverings of the body were a great number of objects in gold: daggers, a gold axe, a chain with three large gold bees, a *breastplate* in gold, two little ships in gold and silver, besides numerous other articles in gold and bronze, on some of which are stamped the cartouche of Aahmes, which leaves the date beyond a doubt. One of these poignards is furnished with a handle decorated with a series of triangles of gold, lapis, cornelian, and felspar, surmounted by a pommel formed by four heads of women in repoussé gold plate: the handle is thus precisely analogous to the one figured in *Mycenæ*, p. 267, and terminates in the same way. The blade is of gold, traversed by a band of sombre metal on which are various devices, encrusted by a process of damascening. In the same tomb were found gold earrings with filagree decorations in spirals which recall the style of the spiral ornaments of Mykenæ, and some gold and silver moths or flies which recall the butterflies of Mykenæan art. It will thus be seen that the whole system of burial in the pit graves at Mykenæ is analogous to a system of which the only other notable example as yet found outside Greece existed in Egypt in the sixteenth century B.C.

In the tombs at Ialysos which are of Mykenæan time was found a scarab of Amenophis III, which of itself, of course, proves nothing, as scarabs were frequently in use for centuries after the date which they seem to bear; but it becomes valuable in con-

nection with the other evidence, which points to early in the second thousand years B.C. for the date of the Mykenæ period. The name of Amenophis III is a significant one, for the recent find of cuneiform tablets at Tel-el-Amarna has shown how extended was the influence of this king in Asia: in these letters addressed by the distant Asiatic peoples to the "King of their Lords", we see how anxious they were to ingratiate themselves with this powerful potentate, who had even married the daughter of one of their own kings, Dushratta, the king of Mitani. Of these tablets Winckler has made a report in the *Philologische Wochenschrift*, 1889, pp. 455 and 609: from which it would seem that much light may be thrown by them upon the early languages of Asia Minor, as well as on the earliest original records of Phœnicia and Palestine.

There is yet one more link which has lately been forthcoming: in the *Academy* of March 16, 1889, Mr. Petrie announces a discovery which he has made at Tell Gurob: in this town, of which the history dates only between the reigns of Khuenates and Ramses II, he claims to have found pieces of pottery which are certainly un-Egyptian, and which are apparently of Mykenæan fabric. If this be proved, we have here an inland town of Egypt containing pottery of the 15th century, which seems to be Hellenic.

It is evident, then, that our attention is being more and more attracted to the importance of that epoch which includes the early centuries of the second thousand years B.C. In this connection we may note a new departure in history which a young German writer has recently initiated. Von Sybel proposes to write a *Weltgeschichte*, that is to say, a history of ancient art according to its epochs: wherein the materials of history, ethnography, and archæology are to be grouped according to periods of time, in order that the universal laws of development and exchange may be comprehensively arranged, and where the system depends upon time rather than upon place. Such a scheme as this can obviously be attempted only at a very advanced stage of our knowledge in the various subjects which it involves. Meanwhile, there is much which still remains to be done. Space does not allow me to do more than merely to touch upon the more pressing of these problems. Quite recently the find of prehistoric bronzes in the cave of Mount Ida, in Krete, has shown us how much may be expected from systematic research in that island, lying as it does at the point of intersection of all the Western sea routes, and of which, as Hoeck said, "the period of prosperity belongs to so ancient

an age, that it was already fallen before the rest of Greece began to flourish."

The finds of Hallstadt and of Vettersfeld, the questions which centre around the trade routes by which amber can have come from the Baltic shores to Mykenæ, are problems which are of the deepest significance for the relations of Northern European culture in the Bronze age and later. The amber question has been well discussed in Deecke's edition of Müller's *Etrusker*, i, p. 264: while Montelius more recently has shown that materials for the same question are being collected in the North.

If the time is not yet come for a *Weltgeschichte* like that of Von Sybel, it is evident at any rate that Greek archæology is tending in that direction. It is so far a sign of the times that the newly elected Professor of Archæology at University College (Dr. R. S. Poole) has recently inaugurated his course of teaching with a series of lectures by Prof. Boyd Dawkins on "Primitive Man".

CECIL SMITH.

THE IDENTIFICATION OF ANCIENT AND MODERN WEIGHTS, AND THE ORIGIN OF "GRAINS".[1]

IN the last paper in vol. i of *Domesday Studies*, being the paper written by me, I have shown how the *same* ancient square Stadium (answering to our modern quarantene) divided by different rods containing different numbers of feet, would give differently-sized acres, the sum total of which, however, would of course amount to the total area contained in the square Stadium, and I suggested that if known positive weights of metal, etc., were divided in the same way, the result would be that the divisions of the weights would in many cases correspond with the divisions of the Stadia into acres, etc. At pages 241 *et seq.* of that volume, and more particularly at p. 248, I show how an entry in *Domesday Book* itself, at fol. 269*b*, in regard to the lands "inter Ripam" being the *locus in quo* of the Cheshire acre of 6 × 60 sexdecimal rods of 16 feet, bears evidence of that fact. In it the Stadia or quarantenes are divided with a sexdecimal rod of 16 feet, and the pound itself is shown as divided sexdecimally into 16 solidi of 16 denarii, as well as into 12 solidi or ounces of 20 denarii, giving, however, in their *totals* exactly the same results (see *post*). I propose now to go somewhat deeper into the matter in regard to the weights; but as I go further back than the introduction of money, *i.e.*, stamped metal, I do not intend to go into the relative value of gold and silver, or of one country with another, but I have confined myself to weight, and merely remark that in some countries they have one weight for gold or silver and another weight for merchandise, and in other countries the same weight does duty for all three.

It is well known that in classical times in Asia, measurements were made by *original* Stadia of six hundred feet (*i.e.*, 400 sesquipedales cubits), whatever the foot might be, this representing 60 decempedal rods. The whole Eastern system was founded on the basis of six into ten, but in after times (and it may be even at the same time) an original square Stadium of 600 × 600 was divided

[1] NOTE.—A Troy grain, or half-chalcus, is .064792 gramme. A gramme is 15.4340 Troy grains.

(without altering the total positive measurements, and instead of 60 × 600 ten times repeated) into 64 × 640 or 72 × 720 or 80 × 800 or 84 × 840 or 96 × 960, that is, into duodecimal or sexdecimal divisions (4 × 16, 5 × 16, 6 × 16, etc., or 5 × 12, 6 × 12, 8 × 12, etc.) without increasing the actual area measured, the alteration being really in the size of the foot, the 4 of 15 in the sixty equalling and answering to the 4 of 16 feet of one-sixteenth less than the original foot, or, in other words, the rod of 15 feet of the one answering to the respective rods of the others, as shown at p. 255 of my paper referred to.

The chief weight among the Asiatics was the "Talent" or "total", and as they divided the Stadium, whatever the length of it might be, thus 40 × 10 cubits, 60 × 10 feet, so did they divide the talent, whatever its positive weight might be (and there were many talents), into 60 minæ of 100 drachmæ each, of 6 obols of 8 chalci, and the following arrangement will show the divisions so made:

1 Talent = 480,000 chalci or 10,000 drachmæ, each of 48 chalci.
= 60 minæ each of 100 (larger, but called by me "original") drachmæ.
= 6,000 drachmæ of 48 chalci.
= 36,000 obols of 8 chalci to obol.
= 18,000 dioboli of 16 chalci.
= 288,000 chalci.

Such was the original division of a talent in ancient times in certain parts of Asia. But perhaps at the same time, and certainly in after (but still ancient) times, these original talents were divided just as the Stadia were divided (instead of into 60) into 64, 75, 80, 84, and 96 minæ, and each of such minæ, if multiplied by *sixty*, would then be the foundation of another talent smaller than the original talent; thus, as we shall see, the Troy talent of 37,320 grammes, or 576,000 Troy grains, divided by 64 and the quotient multiplied by 60, gives the Tower talent of 34,987 grammes, or 540,000 Troy, so the Tower talent of 34,987 grammes divided by 64 gives the Asiatic talent of 32,744 grammes, or 505,300 Troy, the hundredth part of which is the Roman pound. So the Eginetan talent of 37,320 grammes, or 576,000 Troy, *i.e.*, 100 Troy pounds divided by 75, gives the Babylonish of 497.6, thirty of which give 14,928 grammes, or the weight of one of the Babylonish stone ducks, or 480 ounces of the Troy pound, and so on.

We have distinct evidence of this in the statement of Plutarch (15), that Solon lowered the ancient weight by one-fourth. This he would have done by taking the new talent at 75 of the *original* drachma; in other words, as the *original* talent consisted of 60 × 100

or 6,000 original drachmæ, it would consist of 80 ($\frac{6000}{75}$) of the new minæ (see *post*, forms Nos. 4, 5, 11, and 12, and notes thereto); but as we have seen above that a mina was 100 drachmæ, the *original* talent would consist also of (as well as of 288,000 *original* chalci) 80 × 100 × 48, or 384,000 chalci, each, however, reduced one-fourth in size. Carrying on this investigation a step further, it will be observed that every one of these ancient talents was a centum-pondium or a hundredweight, consisting of 60 minæ of *one hundred* drachmæ, as well as 10,000 (100 × 100 drachmæ) (before divided into minæ).

If, then, an original talent was divided by 100, it would give a weight or pondus or pound of 100 drachmæ of 48 chalci, that is, 4800 chalci, or of 60 × 1 × 48, that is, 2880 original chalci, or 80 × 1 × 48 or 3640 reduced chalci, the sixty of the one equalling the 80 reduced of the other, and so on with 64, 72, 84, 96. It is thus, and (it seems) thus only, that the number and weight of grains in any given pound (as I shall show) are to be accounted for, whether they be Roman siliquæ of 6 to the scripulum, Troy grains of 24 to the penny, or "wheat" grains of 32 or 30 to the same: the siliqua being the double chalcus, and the Troy grain and the English wheat being the half chalcus, each, however, of different divisions of the same pound.

In the course of my researches I have become thoroughly convinced that to suppose that any known positive weight is to be arrived at by the multiplication of any number of a particular grain, say wheat, is a fallacy. A practical farmer well knows that the variation in a sack of wheat may be ten pounds, that is, five pounds either way, occasioned by the variation in seasons, let alone other causes of variation—so with the African carouba, the Roman siliqua, and the lentes. Kelly says, p. 87: "The weights and measures of India are extremely curious in the minuteness of their subdivisions. Thus the Ta is divided into a great number of twinklings of an eye, and the barleycorn into small seeds down to an atom of the sunbeam." People have chosen to speak of "grains" (as in 1266 in the Stat. 3 Ed., 51) as a measure of weight, and in our own country that statute declares the Norman penny to be 32 wheat-corns in weight. But these wheat-corns, on examination, as will be seen *post*, are really 32 half chalci of a determinate weight, and the absurdity of it more fully appears in the *absolute* exactness in the *same* weight in different countries thousands of miles apart; thus the Tripoli weight is absolutely the same as our Troy (see *post*, No. 50), and it is stated to be founded on the weight of a bean, ours,

however, on 32 wheat-grains! It certainly is wonderful how the two weights should have been preserved absolutely accurate, and the remark applies to the Swedish and Madras weight, each of 3.401 grammes, and other cases. Further on in this paper will be found the examination of known positive weights. These positive weights I have got from the Reports of the British Consuls abroad, made early in this century, by order of our Government in regard to Foreign Standards duly verified. The results of these reports are collected in Kelly's *Universal Cambist*, London, 1831, being a most valuable book. The British Consuls in many cases report the number of "grains" in the positive weight they are speaking of. When they do so, I place the number so reported immediately below the name of the place using the weight, and it will be seen that in *every case* they are deduced from the old Asiatic form of 48 chalci to the drachma, and not at all from the vegetable grains, which at best can only afford a rough and ready method of calculation. See particularly Nos. 22, 23, 31, 51, 82, and the note after No. 80 *post*.

As it will be most convenient to show these divisions of the talent into 60, 64, 72, 80, 84, 96 minæ, so that they can be referred to as forms, the following tables represent them, and to them I shall constantly refer.

But I must remark that the ancient Egyptians divided their weights in a different way; it was a binary or joint sexdecimal and decimal system, *i.e.*:

2 × 10 × 10 etc.	32 × 10 × 10 etc.
4 × 10 × 10 etc.	40 × 10 × 10 etc.
8 × 10 × 10 etc.	48 etc.
16 × 10 × 10 etc.	64 etc.
24 × 10 × 10 etc.	72 etc.

and so on.

Talent = 1200 *ounces, or* 10,000 *of its own drachmæ of* 48 *chalci.*

No. 1.	$\frac{T}{60}$ (24,000 dioboli of 12 chalci = 18,000 dioboli of 16 chalci.)	= 60 original (see *ante*) minæ of 20 original ounces. 6,000 original drachmæ of 48 chalci. 36,000 original obols of 8 chalci. 48,000 obols of 6 chalci, instead of 8 chalci. 18,000 original dioboli of 16 chalci. 24,000 dioboli of 12 chalci, instead of 16 chalci. 288,000 original chalci, 144,000 double chalci, 576,000 half chalci, and $1\frac{1}{2}$ minæ = 864,000 half chalci.

No. 2.	$\frac{T}{64}$ (25,600 dioboli of 12 chalci = 1,920 of 16 chalci.)	= 64 reduced minæ of $18\frac{3}{4}$ original ounces = 60 original minæ.[1] 6,400 reduced drachmæ of 48 reduced chalci. 38,400 reduced obols of 8 reduced chalci. 19,200 reduced dioboli of 16 reduced chalci. 307,200 reduced chalci, 153,600 double chalci, 614,400 half chalci.
No. 3.	$\frac{T}{72}$ (28,800 dioboli of 12 chalci or 6 siliquæ = 21,600 dioboli of 16 chalci.)	= 72 reduced minæ of $16\frac{2}{3}$ original ounces = 60 original minæ. 7,200 reduced drachmæ of 48 reduced chalci. 43,200 reduced obols of 8 reduced chalci. 21,600 reduced dioboli of 16 reduced chalci (siliquæ). 345,600 reduced chalci, 172,800 double chalci, 691,200 half chalci.
No. 4.	$\frac{T}{75}$ (24,000 dioboli of 30 half chalci = 24,000 of 32 of No. 5.)	= 75 reduced minæ of 16 original ounces = 60 original minæ.[2] 7,500 reduced drachmæ of 48 reduced chalci. 45,000 reduced obols of 8 reduced chalci. 36,000 reduced oboli of 10 reduced chalci. 22,500 reduced dioboli of 16 reduced chalci. 18,000 reduced dioboli of 20 reduced chalci. 360,000 reduced chalci, 180,000 double, 720,000 half chalci.
No. 5.	$\frac{T}{80}$ (24,000 dioboli of 32 half chalci = 256 dioboli of 30 half chalci.)	= 80 reduced minæ of 15 original ounces = 60 original minæ.[3] 8,000 reduced drachmæ of 48 reduced chalci. 48,000 reduced obols of 8 reduced chalci. 24,000 reduced dioboli of 16 reduced chalci. 384,000 reduced chalci, 192,000 double chalci, 768,000 half chalci.
No. 6.	$\frac{T}{84}$ (288,000 dioboli of 14 chalci = 25,200 dioboli of 16 chalci.)	= 84 reduced minæ of $14\frac{2}{7}$ original ounces = 60 original minæ. 8,400 reduced drachmæ of 48 reduced chalci. 50,400 reduced obols of 8 reduced chalci. 57,600 reduced obols of 7 reduced chalci. 25,200 reduced dioboli of 16 reduced chalci. 28,800 reduced dioboli of 14 reduced chalci. 403,200 reduced chalci, 201,600 double chalci, 806,400 half chalci.
No. 7.	$\frac{T}{96}$ (288,000 dioboli of 16 chalci.)	= 96 reduced minæ = 60 original minæ. 9,600 reduced drachmæ of 48 reduced chalci. 57,600 reduced obols of 8 reduced chalci. 28,800 reduced dioboli of 16 reduced chalci. 460,800 reduced chalci, 230,400 double chalci, 921,600 half chalci.
No. 8.	$\frac{T}{100}$ Divided as follows, *i.e.*— (240 dioboli of 12 chalci or 24 half chalci, or 180 dioboli of 32 half chalci)	= 1 pound of 12 ounces. 100 drachmæ of 48 chalci. 60 original drachmæ of 48 chalci. 360 original obols of 8 chalci. 480 obols of 6 chalci instead of 8 chalci. 180 original dioboli of 16 chalci. 240 dioboli of 12 chalci, instead of 16 chalci. 2,880 original chalci, 1,440 double chalci, 5,760 half chalci. A pound and a half = 8,640 half chalci; a

[1] A mina and a half = 921,600 half chalci. Twenty ounces = 10,240 half chalci.

[2] As all these several divisions equal 60 original minæ, therefore No. 4 divided into 15 ounces or units each of 5 of these reduced drachmæ = 16 ounces or units of 5 of the reduced drachmæ of the next division, No. 5, because 75 is to 80 as 15 is to 16.

[3] See [2] above.

		pound and a third or sixteen ounces = 7,680 half chalci ; a pound and a fourth, or fifteen ounces = 7,200 half chalci ; three-quarters of a pound = 4,320 half chalci.
No. 9.	$\frac{T}{100} = \frac{P}{64}$ (256 dioboli of 24 half chalci or 192 dioboli of 32 half chalci.)	Pound of 12 ounces. 64 reduced drachmæ of 48 reduced chalci. 384 reduced obols of 8 reduced chalci. 512 reduced obols of 6 reduced chalci. 192 reduced dioboli of 16 reduced chalci. 256 reduced obols of 12 reduced chalci. 3,072 reduced chalci, 1,536 double chalci, 6,144 halt chalci. 16 ounces would be 8,192 of these half chalci, and 1½ pound of 9,216 half chalci, eight ounces of 4,096 half chalci, and twenty ounces of 10,240 half chalci.
No. 10.	$\frac{T}{100} = \frac{P}{72}$ (288 of 12 chalci or 24 half or 216 dioboli of 16 chalci.)	Pound of 12 ounces. 72 reduced drachmæ of 48 reduced chalci. 432 reduced obols of 8 reduced chalci. 216 reduced dioboli of 16 reduced chalci. 3,456 reduced chalci, 1,728 double chalci or siliquæ, 6,912 half chalci. A pound and a half = 10,368 half chalci, and 16 ounces 9,216 half chalci, and 8 ounces 4,608, and 15 ounces 8,640 half chalci ; 20 ounces are 2,880 siliquæ or double chalci, or 11,520 half chalci.
No. 11.	$\frac{T}{100} = \frac{P}{75}$ (240 dioboli of 30 half chalci or 240 dioboli of 32 of No. 12.) Note, 75 is to 80 as 30 is to 32.	Pound of 12 ounces. 75 reduced drachmæ of 48 reduced chalci. 450 reduced obols of 8 reduced chalci. 480 reduced obols of 7½ reduced chalci. 225 reduced dioboli of 16 reduced chalci. 240 reduced dioboli of 15 reduced chalci. 3,600 reduced chalci, 1,800 double chalci, 7,200 half chalci = 7,680 of No. 12 (*see* *note 1), 15 ounces are 9,000 half chalci, 16 ounces 9,600 half chalci, 8 ounces 4,800 half chalci, and a pound and a half 10,800 half chalci.
No. 12.	$\frac{T}{100} = \frac{P}{80}$ (240 dioboli of 32 half chalci or 256 of 30 half chalci. See Note * above.)	Pound of 12 ounces. 80 reduced drachmæ of 48 reduced chalci. 480 reduced obols of 8 reduced chalci. 512 reduced obols of 7½ reduced chalci. 240 reduced dioboli of 16 reduced chalci. 256 reduced dioboli of 15 reduced chalci. 3,840 reduced chalci, 1,920 double chalci, 7,680 half chalci. 8 ounces of this would be 5,120 half chalci, and 16 ounces 10,240 half chalci, 18 ounces 11,520 half chalci. See Note * above in No. 11.

[1] Note. As all these divisions equal a pound, therefore 15 units of 5 of these reduced drachmæ of 48 reduced chalci of form 11 = 16 units of the next (No. 12) division of 5 reduced drachmæ of 48 reduced chalci of that division, and it is owing to this consideration that the entry in Domesday "inter Ripam" is capable of explanation, and is as I have explained by the entries in Domesday Book "inter Ripam". I reproduce the explanation at the end of these forms, showing how 240 (7,200 of division 11 divided by 30) of 32 half chalci of division 12 must therefore equal 256 (7,680 of division 12 divided by 30) of 30 of that division.

No. 13.	$\frac{T}{100} = \frac{P}{84}$ (288 dioboli of 14 chalci or 252 dioboli of 16 chalci.)	Pound of 12 ounces. 84 reduced drachmæ of 48 reduced chalci. 504 reduced obols of 8 reduced chalci. 576 reduced obols of 7 reduced chalci. 252 reduced dioboli of 16 reduced chalci. 288 reduced dioboli of 14 reduced chalci. 4,032 reduced chalci, 2,016 double chalci, 8,064 half chalci. A pound and a half = 12,096 half chalci, 15 ounces 10,080 half chalci, 16 ounces 10,752, 18 ounces 12,096 half chalci.
No. 14.	$\frac{T}{100} = \frac{P}{96}$ (288 dioboli of 32 reduced half chalci.)	Pound of 12 ounces. 96 reduced drachmæ of 48 reduced chalci. 576 reduced obols of 8 reduced chalci. 288 reduced dioboli of 16 reduced chalci. 4,608 reduced chalci, 2,304 double chalci, 9,216 halt chalci. A pound and a half = 13,824 half chalci. 15 ounces = 11,520 half chalci. 16 ounces = 12,288 half chalci, 6,144 chalci. 8 ounces = 6,144 half chalci.
No. 15.	$\frac{T}{120} =$	Pound of 10 *original ounces* or 100 drachms. 100 drachmæ of 48 chalci = 4,800 chalci. 600 obols of 8 chalci. 300 dioboli of 16 chalci. $1\frac{1}{2}$ pound would be 7,200 chalci. Of course this pound might be divided as the hundredth part of a smaller talent (consisting of 1,000 ounces instead of 1,200), just as in any one of the above pounds (see Nice, *post*, 29, and Barcelona, No. 81). Priscianus has a passage in his *Liber de figuris numerorum* as follows: "Idem Livius in xxxviii ab urbe condita ostendit magnum talentum Atticum Octaginta habere libras et paulo plus cum supra dictorum computatio manifestet Octaginta tres libras et quatuor uncias habere talentum quod est sex milia denariorum." $12 \times 83 + 4 = 1{,}000$ ounces.
No. 16	$\frac{T}{100} =$	Pound of 100 drachmæ or 4,800 chalci. (Egyptian.) 4,800 = pound. 6,000 = $1\frac{1}{4}$ pound. 6,400 = $1\frac{1}{3}$ pound. 7,200 = $1\frac{1}{2}$ pound. 8,000 = $1\frac{2}{3}$ pound. 9,600 = 2 pounds. 12,800 = $2\frac{2}{3}$ pounds. And so on; but it is to be observed that any one of the above divisions might be taken as the foundation of a new weight, as with the former forms.

Explanation of the Entry "inter Ripam" in Domesday, referred to Forms 11 *and* 12 ante.

We have in D. Bk. itself, relating to the Survey of that part of Mercia lying between the Ribble and the Mersey, a recital showing the number of carucæ that there went to a hide, and their "valets" at the time of Edward the Confessor.

These "valets" are there sometimes stated in Norman currency of 12 ounces or oræ of 20 denarii to the pound, and in others in the Mercian currency, tallying exactly with the foregoing forms, *i.e.*, that which gives 240 pence of 32 half chalci of Form 12, and also 256 denarii, *i.e.*, 16 oræ or solidi of 16 pence of 30 half chalci of Form 12 to the pound or mark; but there is a general statement applying to all these carucæ and the thains who owned them, to be found at the head of the second column of fol. 269*b*, D. Bk., running thus: "*Omnes isti taini habuerunt consuetudinem reddere ii oras denariorum de unaquaque caruca.*"

I have extracted from D. Bk. and placed in the next table, below the manors to which the recital refers, their carucæ and their valets as stated in D. Bk., placing in adjoining columns such valets in Norman and Mercian currency, the figures in brackets being mine. As the valet for one car is stated to be 32 denarii or 2 ores, it follows that each Mercian ora or solidus contained 16 denarii, as at Pampesuuorde in Cambridgeshire. (Hamilton's *Inq. Com. Cant.*, p. 38.) We learn also from the valets of Latune and Hirleton, where half a hide is put at 10 sol. and viii. denarii (128 pence), that there must have been *four* car in half a hide (4 × 32) or *eight* in a whole one; the valet therefore for a whole hide was 256 Mercian pence or one mark, equalling, as shown in the subjoined table in other entries, one Norman pound of 240 pence. This recital of D. Bk. refers to manors, lands, and carucæ as they were in the time of Edward the Confessor when held by Roger Pictavensis: the statement of the same lands and the re-arranged carucæ working thereon, when held by the grantees of Roger at the time of D. Bk., is placed later on in the same folio, and shows different carucæ and uniform valets in Norman money. It has been seen that by the valets one hide by custom would pay 256 pence (8 × 32); supposing then that 32 Mercian pence represented the payment for a virgate (and we know that it did from the entry in regard to Stochestede, where a virgate and a half is valued at 4 sol., *i.e.*, 3 Mercian solidi of 16 pence each, or 4 solidi of 12, *i.e.*, in all 48 pence), it follows that there were 8 virgates in a hide, each valued at 32 Mercian pence

per virgate; this at one penny per acre would give 16 acres to the bovate, 32 to the virgate, and 256 to the hide or pound paying unit.

1 hide = 256 acres, *i.e.*, 8 virgates of 32 acres = 16 bovates of 16 acres
Single car. = 32 „ 1 „
*Double car. = 64 „ 2 „
Norman, 240 den. to pound, 20 sol. to pound, 12*d.* to sol., 32 grains to den.
Mercian, 256 „ 16 „ 16*d.* „ 30 „

Name of Manor.	No. of Hides.	No. of 'Car.'	'Valet' T. R. E. as stated in D. Bk.	Form 12. Norman Value in Denarii (32 wheat grains to den.).	Form 12. Mercian Value in Denarii (30 wheat grains to den.).	No. of Grains.	The 'Valet' stated in
Hitune . .	1	4*	20 sol.	240	256	7,680	Norman money
Stochestede .	($\frac{3}{16}$) 1½ virg.	(1½)	4 „	45	48	1,440	Mercian „
Sextone . .	1	(8)	16 „	240	256	7,680	„ „
Chirchedele .	½	(4)	10 „	120	128	3,840	Norman „
Liderlant . .	½	(4)	8 „	120	128	3,840	Mercian „
Hinne . . .	½	(4)	8 „	120	128	3,840	„ „
Torentum .	½	(4)	8 „	120	128	3,840	„ „
Mele . . .	½	(4)	8 „	120	128	3,840	„ „
Uluentune .	(¼)	2	64 den.	60	64	1,920	„ „
Esmedune .	(⅛)	1	32 „	30	32	960	„ „
Alretune . .	½	(4)	8 sol.	120	128	3,840	„ „
Spec . . .	(¼)	2	64 den.	60	64	1,920	„ „
Cilderunelle .	(½)	(4)	8 sol.	120	128	3,840	„ „
Wilbaldeslei .	(¼)	2	64 den.	60	64	1,920	„ „
Vuetone . .	(⅛)	1	30 „	30	32	960	Norman „
Wauretreu .	(¼)	2	64 „	60	64	1,920	Mercian „
Boltelai . .	(¼)	2	64 „	60	64	1,920	„ „
Achetun . .	(⅛)	1	32 „	30	32	960	„ „
Fornebei . .	(½)	4	10 sol.	120	128	3,840	Norman „
Emuluesldel .	(¼)	2	64 den.	60	64	1,920	Mercian „
Hoiland . .	(¼)	2	64 „	60	64	1,920	„ „
Daltone . .	(⅛)	1	32 „	30	32	960	„ „
Schelmeresdele	(⅛)	1	32 „	30	32	960	„ „
Erengermeles	(½)	(4) 2*	8 sol.	120	128	3,840	„ „
Otegrimele .	½	(4)	10 „	120	128	3,840	Norman „
Latune . .	½	(4)	10 sol. 8d.	120	128	3,840	Mercian „
Herletune .	½	(4)	10 sol. 8d.	120	128	3,840	„ „
Melinge . .	(½)	(4) 2*	10 sol.	120	128	3,840	Norman „
Bartune . .	(⅛)	1	32 den.	30	32	960	Mercian „
Heleshall . .	(½)	(4) 2*	8 sol.	120	128	3,840	„ „
Total . .	11$\frac{11}{16}$	93½	pence .	2,805	2,992	—	2,992 ac. = 93½ car. of 32 acres to car. = 1 virg.
„ . .	—	—	grains .	89,760	89,760	89,760	11$\frac{11}{16}$ hides of 256 to hide.

The antiquity of the division of the pound or 100 part of the talent into 256 denarii according to Form 12 is shown by the *Ancient Laws of Wales* (Record Commission, 1841, p. 90; Venedotian Code, Book 2, c. xvii), being a manuscript written long before

1080, but containing the ancient laws of Wales, said to have been collected and compiled by Howel-dda in or about the year 743, and in it we find that Dyonmal, son of Clydno, measured the whole of Great Britain "*before the Crown of London and supremacy of this Island was seized by the Saxons*". In it the *pound paying* unit of land was the "mænol" (see *Ancient Laws, etc.*, p. 90), consisting of 1,024 erws. As the "mænol" was the pound paying unit, each erw would pay one farthing if the pound consisted of 256 pence, *i.e.*, the very number the pound would contain according to Form 12. Taking the divisions of the land as stated in the *Ancient Laws*, the following represents it:—

1 erw = 1 farthing.
4 erws = 1 tydden = 1*d.*
16 erws = 1 rander = 4*d.*
64 erws = 1 gavael = 16*d.*
256 erws = 1 trev = 64*d.* or threescore Norman pence of 32 wheat grains or 24 Troy (*see* Forms 11 and 12).
1,024 erws = 1 mænol = 256*d.* = 1 pound of silver.

At page 91 of the *Ancient Laws, etc.*, sec. 15, written in the thirteenth century, we read (in language suited to the money of that day), "Three score pence is charged on each trew of the four that are in a mænol, *and so subdivided into quarters in succession until each erw of the tydden be assessed*," therefore there is no erw in the mænol free from taxation, an expression which is only consistent with a pound of 256 pence. In the same way the treaty and the money in the treaty between Alfred and Guthrum are to be explained. I have explained it at p. 242 *et seq.* of vol i of *Domesday Studies*, the results of which, as the explanation is too long to put here, see No. 45*e* and No. 45*f post.*

I will now proceed to apply the above principles to known talents and existing pounds, merely remarking that it is marvellous how well preserved weights have been—no thanks, however, to vegetable grains—so closely have they been preserved that in some cases they are *absolutely* alike; for instance, the Barbary rottol and the Troy pound, the Swedish and the Madras drachms, etc.; and I shall call everything "exact" which does not vary more than the fraction of a Troy grain in an ounce.

I will take Solon's Attic weight first as a standard to which Xenophon and others refer, and because it happens to be the best known. The weights of existing drachmæ (of which there are hundreds still in existence) show it to be between 4.3735 grammes, 67.5 Troy, and that at which Hultsch places it, viz., 4.3665 grammes —practically this is the same thing, as a pound founded on the one

makes 5,400 Troy grains, and founded on the other 5,390, which is exactly the same within my heretofore expressed meaning of the word "exact". Taking 8,000 of these, Solon's drachmæ, to find the *original* talent, it resolves itself into this :

Original Asiatic Talent, 34,987 grammes, or 540,000 Troy grains.
Talent ÷ 60 mina of 583.11 grammes, or 9,000 Troy grains.
Talent ÷ 80 mina of 437.335 grammes, or 6,750 Troy grains.
Talent ÷ 100 mina of 349.87 grammes, or 5,400 Troy grains.

We have therefore here as a standard, firstly, a drachma of 3.4987 grammes; secondly, a drachma of 5.8311 grammes, when the *original* talent is divided normally (Form 1) into 60 minæ each of 100 drachmæ ; and thirdly, a drachma of 4.37335 grammes, when Solon divided the original talent into 80 minæ each of 100 of such drachmæ, so the talent, reckoned according to Form 1, would be 288,000 chalci, and according to Form 5, would be 384,000 chalci. The Troy grain, of course, is not derived from it, but from a very different talent, hereinafter shown.

The Asiatic Talent of 34,987 *grammes* (540,000 *Troy*).

The identity of this talent is proved thus : under the head of an Asiatic "Siclos" Photius describes it as equal to 8 Attic obols—taking 4.37335 grammes as the Attic drachma (see *ante*), or 67.5 Troy ; and dividing it by six to get the obol, we have .72888 grammes as the Attic obol ; this multiplied by 8 gives 5.83104 as the "Siclos" ; this multiplied by 100 gives the mina (100 drachmæ), or 583.104 ; and this multiplied by 60 gives the talent of 34986.24 (540,000 Troy) ; it is also the contents of 80 Attic drachmæ of 4.37335 grammes or 75 Eubean drachmæ of 4.665.

	Error.	Place.	Weight.	Talent of 34,987 grammes.
17.	Exact.	ENGLAND.	Pound.	Tower (Talent divided by 100) : 349.87 grammes (or 5400 Troy), divided into 12 ounces of 3456 chalci or 6912 half chalci, Form 10, the half chalcos or grain would therefore be .05062 grammes. This is the Tower Pound of 24 solidi of 12 peninga = 288, if the peninga were of 24 half chalci of Form 10. If the pound was divided according to Form 8 into 240 peninga, of course there would be 5760 half chalci of .0607 grammes, and the pound would divide into 240 denarii

	Error.	Place.	Weight.	Talent of 34,987 grammes.
				of 24 half chalci of Form 8 to the denarius, but I imagine that the Anglo-Saxons, using the long hundred, divided their pound into 288 peninga like the Romans. This pound I have no doubt the Saxons found here when they came; it is, as we have seen, formed on the same talent as Solon's Attic drachmæ which have been dug up in England.
18.	Exact.	ENGLAND.	Libra.	Mercatoria of Fleta, 437.335 grammes, or 8640 half chalci of Form 10 (6750 Troy), *i.e.*, fifteen ounces, or solidi of 12 peninga of 24 half chalci. This is the pound of 15 ounces, marked 15, in pre-Norman times; it is Solon's Attic mina, 60 of which made his reduced talent of 26,232 grammes, and eighty the original talent, or 34,987 grammes. The identity of it is confirmed by the following extract, to be found at page 33 of the Appendix to the Government Reports on Weights and Measures, 1820, under the word "Stone" of lead: "15 pounds each, 25 shillings in weight, 31 Ed. I: that is, each of 6750 grains." This of course is the Norman arrangement; the Saxon would be 30 shillings of 288 half chalci of Form 10 (see the division of No. 83); Pollux calls it the Italian mina (see also No. 86). The following are all derived from the same talent (*see* note after No. 80 and No. 83).
18 A.	Exact.	SAYDE (Syria). Kelly, p. 227.	Rottolo.	Of Acre, 2186.082 grammes or 43,200 half chalci (33,740 Troy). This is 5 of Fleta's libræ mercatoriæ, see above; within *two* Troy grains in the pound, *i.e.*, 6748 (Troy, instead of 6750 Troy). There was another rottolo of 60 Troy ounces of 10 drachms to ounce.
18 B.	Exact.	ARRAGON, 6144. Kelly, p. 23.	Pound.	Pensil (talent ÷ by 100): 349.8 grammes or 6144 grains (half chalci, Form 9), (5398 Troy). This is within 2 grains of the Tower pound of 5400 Troy. This is divided into 12 ounces of 192 arienses each, of 32 grains of .05694 grammes. The mark of 8 ounces is 50 Troy grains light, and is that of Spain.
19.	Exact.	BRUNSWICK, 8192. Kelly, p. 54.	Pound.	Commercial (talent divided by 75); 466.891 or 8192 grains or half chalci of .057 grammes, Form 9 (7206 Troy). This is divided into 1024 hellars or 16 ounces of 32 pfenings of 16 half chalci each.

	Error.	Place.	Weight.	Talent of 34,987 grammes.
20.	Exact.	LEIPSIC, 7680. Kelly, p. 205.	Pound.	Commercial, 466.8 grammes (talent divided by 75), or 7680 half chalci of .06079 grammes, Form 8 (7206 Troy). Note that 512 of 15 = 256 of 30 ; there are 16 ounces of 512 pfenings.
21.	Exact.	FRANKFORT, 8192. Kelly, p. 148.	Pound.	Commercial (talent divided by 75): 467.15 grammes or 8192 half chalci, .0571 grammes, Form 9 (7210 Troy), divided into 1024 hellars and 512 pfenings.
22.	1 Troy grain in ounce out.	COLOGNE, 8192. Kelly, p. 71.	Pound.	Commercial (talent divided by 75) : 467.538 grammes or 8192 grains or half chalci of .0571 grammes, Form 9 (7216 Troy). Divided into 16 ounces of 512 pfenings. The mark of 8 ounces is half this. Each of the half chalci is subdivided into 16 parts, and each 16 half chalci equal 17 eschen. So here we have the weight of the half chalcos, and the weight of the vegetable grain as supposed.
23.	Ditto.	HAMBURG, 8192. Kelly, p. 170.	Pound.	Gold and silver (talent divided by 75) : 467.538 or 8192 half chalci of .0571 grammes, Form 9 as above ; but note this is accommodated to the Dutch esch, which is $\frac{1}{16}$ lighter, so that there would be 544 eschen instead of 512 grains to an ounce. 512 + a sixteenth = 544 ; there are therefore 8704 eschen, or 8192 half chalci of Form 9, called at Hamburg Richt pfenings. *See* Cologne above, and *see* Zürich *post*, No. 31.
24.	$1\frac{14}{16}$ Troy out.	BERLIN, 7680. Kelly, p. 34.	Pound.	Commercial (talent divided by 75), *i.e.*, 468.50 grammes, or 7680 half chalci of Form 8 (7231 Troy), divided into 512 pfenings or 16 ounces.
25.	$1\frac{3}{16}$ Troy grain out in ounce.	STETTIN. Kelly, p. 324.	Pound.	Commercial (talent divided by 75): 467.7 grammes of 16 ounces (7219 Troy). Divided as at Cologne.
26.	$1\frac{1}{4}$ Troy grain out in ounce.	WIRTEMBERG. Kelly, p. 369.	Pound.	Commercial (talent divided by 75): 467.8 grammes of 16 ounces (7220 Troy). Divided as at Cologne.
27.	2 Troy grains out in ounce.	KONIGSBERG 7680. Kelly, p. 198.	Pound.	Commercial (talent divided by 75): 468.5 grammes, 7680 grains or half chalci, Form 8 (7231 Troy), $\frac{1}{2}$ chalcos = .061 gramme, reckoned as at Berlin by an edict of 1714.
28.	$1\frac{1}{2}$ Troy grain out in ounce.	AIX LA CHAPELLE. Kelly, p. 2.	Pound.	Commercial (talent divided by 75) : 468.705 grammes (7234 Troy), 512 pfenings in 16 ounces.
29.	Exact.	ST. GALL. Kelly, p. 350.	Pound.	(Heavy) (talent divided by 60) or the mina of 584.164 grammes (9016 Troy), pound of 20 ounces. This is the original mina of the talent ; 34,987 grammes ÷ 60 = 583.1 grammes.
30.	$1\frac{9}{16}$ Troy grain out in ounce.	Ditto.	Pound.	(Light) (talent divided by 75) : 464.822 grammes (7175 Troy) in 16 ounces.

	Error.	Place.	Weight.	Talent of 34,987 grammes.
31.	Exact.	ZURICH, 8192. Kelly, p. 375.	Pound.	Light (talent divided by 75): 468.6 grammes, 8192 grains or half chalci of Form 9 (7233 Troy). This pound is 16 ounces, but this is accommodated to the Zürich grain, which is $\frac{1}{16}$ lighter, so there are 8704 Zürich grains (see Hamburg, *ante*, No. 23 of Form 9), and 17 of such grains in 16 of the 8192 and in the 512 pfenings.
32.	...	Ditto, 9216.	Pound.	Heavy. This is 18 ounces instead of 16, and note that in both 16 grains (17) are put into the penny, and in the pound there are 9216 of Form 9, 8138 Troy grains.
33.	$1\frac{2}{3}$ Troy grain out in ounce.	CANDIA. Kelly, p. 62.	Rottello.	527.25 grammes, 18 ounces of the Tower pound (8143 Troy).
34.	Exact.	ULM. Kelly, p. 352.	Pound.	Commercial (talent divided by 75): 468.7 grammes (7234 Troy). This is 16 ounces or two marks.
35.	$2\frac{3}{4}$ Troy grains out in ounce.	ROTTERDAM. Kelly, p. 297.	Pound.	Light (talent divided by 75): 469.38 grammes, or 7243 Troy grains, or 7680 of half chalci of Form 8, of .0611 grammes.
36.	$1\frac{7}{12}$ Troy grain out in ounce.	GENOA, 6912. Kelly, p. 159.	Peso.	Grosso (talent divided by 100): 348.6 grammes, 6912 grains or half chalci, Form 10, of .05043 grammes (5381 Troy). This is divided into 12 ounces of 24 denarii of 20 grains, like the Anglo-Saxon, or 288 in all. The talent of 34,860 grammes was also divided into 100 Rottoli of 18 ounces, or 150 pounds of 12 ounces. There was a Peso Sotile of 316.963, of which the peso grosso is ten per cent. heavier.
37.	$3\frac{3}{4}$ Troy grains out in ounce.	MECCA. Kelly, p. 226.	Rottolo.	Talent (divided by 75): 462.874 grammes in 15 ounces (7144 Troy grains). Note, divided into 15 instead of 16.
38.	$2\frac{1}{4}$ Troy grains out in ounce.	BETELFAGUI. Kelly, p. 40.	Rattlo.	Talent (divided by 75): 462.198 in 16 ounces Vakias (7136 Troy), 7680 half chalci (Form 3), of .06019 grammes.
39.	4 Troy grains out in ounce.	STRASBURG. Kelly, p. 327.	Livre.	470.778 (7266 Troy) or 7680 half chalci of Form 8, of .0613 grammes.
40.	Exact.	OVIEDO. Kelly, p. 226, vol. ii.	Talent.	Or 6990.996 grammes, or 20 pounds of 349.549. In 12 ounces like the Anglo-Saxons, 5395 Troy grains or 6912 half chalci of Form 10.
41.	5 Troy grains out in ounce.	GALICIA. Kelly, p. 150.	Pound.	Commercial (talent divided by 60): 576.0 grammes of 20 ounces. Sixty of this is the Tower talent, viz., 60 × 5760 grammes = 34,560 grammes, less 5 Troy grains in ounce. Twelve hundred ounces in talent. See No. 44.
42.	5 Troy grains out in ounce.	CONSTANCE. Kelly, vol. ii, p. 224.	Pound.	Commercial (talent divided by 75): 472. grammes (7285 Troy grains).

	Error.	Place.	Weight.	Talent of 34,987 grammes.
43.	5 Troy grains out in ounce.	ERFURT. AUGSBURG. Kelly, p. 25.	Mark.	Exactly the same. Eight ounces of the talent (or talent divided by 150) : 236.036 grammes or 3840 half chalci of .0614 grammes, Form 8. Divided into 256 pfenings of 15 half chalci and 8 ounces. There are 3643 Troy grains.
44.	5 Troy grains out in ounce.	JAPAN. Kelly, p. 197.	The Catty	Talent (divided by 60): 589.607 grammes of 20 ounces of 29.48 grammes to ounce. 9100 Troy grains or 455 to ounce. See No. 41.
45.	$2\frac{5}{8}$ Troy grains out in ounce.	ALEXANDRIA Kelly, p. 4, and vol. ii, p. 224.	Rottolo.	Zauro, double (talent divided by 75) : 938.5121 grammes, 2 pounds each of 16 ounces of 469.256 grammes. Total, 14,485 Troy grains, 15,360 chalci, Form 8, of .0611 grammes.

It is to be observed that (in all the above cases, when the original talent of 34,987 grammes is divided by 75) the same result would be attained by dividing the original Troy talent of 37,320 grammes by 80, both divisions produce 100 of the drachma of 4.665, which is the Eubœan drachma, so it is quite possible that both weights were in England side by side. The talent of 34,987, divided by 80, produces 100 of Solon's Attic drachma of 43,665, or 4.373, as already stated, and the talent of 32,744 (see *post*), divided by 75, would produce the same result.

The Eginetan, Syro-Phœnician, Assyrian, and Chinese Talent of 37,320 grammes, or 576,000 Troy grains, or 10,000 drachmæ of 3.7320.

This talent is well identified by existing drachmæ of Egina of 6.22 grammes or 96 Troy grains, *i.e.*, 60×622 grammes (the mina)=37,320 the talent (see Hussey, *Weights and Measures*, p. 59), and also by the prevalence in old times on the sea-coast of Asia Minor and the Islands of the little gold piece of 40 Troy grains (*Hussey*, p. 72), or 2.59168 grammes, 144 of which make exactly 373.2 grammes, and 100 of these latter the talent. Moreover, there are in the British Museum some large stone ducks dug up at Babylon, weighing 480 *Troy* ounces, and therefore they would be 40 Troy pounds or 14,928 grammes, *i.e.*, 4×373.2 (Troy pound). On the back of some of these ducks there are certain inscriptions stating them to be thirty mana or half $\frac{60}{2}$ a Babylonian talent (see *Discoveries in the Ruins of Nineveh and Babylon*, by Layard, 1853, p. 100) ; each one of these, therefore, would be 30 of

16 ounces (that is, 497.6 grammes, 16 × 31.1 grammes or Troy ounce), and therefore 75 of these minæ, according to Form 4, make the talent of 37,320 grammes, the hundredth part of which is the Troy pound and the 75th part the Babylonish maneh of 497.6 grammes, and it is also the amount of 80 Eubœan drachmæ of 4.665 grammes. Moreover, there are two stone weights dug up at Herculaneum, numbered 190 and 191 by Bayardi (see *Boeckh*, p. 183), and they each weigh 3731 grammes, that is, 10 Troy pounds each, or 800 Eginetan drachmæ of 4.665.

	Error.	Place.	Weight.	Talent of 37,320 grammes.
45. (*a*)	Exact.	ENGLAND, 5760.	Troy.	Pound (talent divided by 100): 373.2 grammes or 5760 half chalci, Form 8, *i.e.*, 5760 Troy. Divided into 12 ounces or 240 pennies of 24.
45. (*b*)	Exact.	ANGLO-SAXON, 5760.	Troy.	373.2 grammes or 5760 half chalci of Form 10. Divided into 12 ounces or 288 pennies of 20 half chalci.
45. (*c*)	Exact.	APOTHECARIES, 5760.	Troy.	373.2 grammes of 5760 half chalci of Form 8. Divided into 12 ounces of 288 scruples of 20 half chalci. Five of these half chalci equal 8 of Form 14.
45. (*d*)	Exact.	BABYLON, Ancient.	Mina.	497.6 grammes or 7680 half chalci of Form 8, divided into 16 ounces. This is one of the 30 mana described above.
45. (*e*)	Exact.	"INTER RIPAM."	Pound.	Talent (divided by 100): 373.2 grammes or 7680 half chalci of Form 12 (5760 Troy), *i.e.*, 12 ounces of 240 pence of 32 of such half chalci (see explanation of "inter ripam" *ante*, and also notes to Forms 11 and 12 *ante*.
45. (*f*)	Exact.	"INTER RIPAM."	Pound.	373.2 grammes or 7680 half chalci of Form 12 (5760 Troy), 16 solidi of 16 pence (256) of 30 of such half chalci (see *ante*, explanation of "inter ripam").
46.	Exact.	BASSORA (Arabia), 72. Kelly, p. 30.	Miscal.	Talent (divided by 8000): 4.665 grammes 72 grains (72 Troy), this is the Eubœan drachma, and 80 of them make the Troy pound, and the miscal is the exact weight of the old Eubœan drachma of 4.665 grammes. But 100 of these drachmæ go to the pound or checki, making exactly 466.5 grammes, or 7200 Troy grains or chalci, *i.e.*, 15 ounces of 31.1, and the arrangement would be according to Form 8. The ½ chalcos is .064792 gramme or a Troy grain (*see* No. 18 and paragraph after No. 45).
47.	Exact.	ABYSSINIA, 4800. Kelly, p. 2.	Rottolo.	Talent (divided by 120): 311 grammes, 4800 Troy grains or half chalci, is therefore exactly 10 Troy ounces or

	Error.	Place.	Weight.	Talent of 37,320 grammes.
				ten-twelfths of the Troy pound ; in other words, the talent would be divided by 120 instead of 100, thus producing 120 rottolo instead of 100 pounds—so, instead of 5760 half chalci to the pound, there would be only 4800, according to Form 15. The half chalcos is .064792 grammes or Troy grains.
48.	Exact.	SAYDE, 28,758. Kelly, p. 227.	Rottolo.	Of 60 ounces of 10 drachms to ounce of 31.037, 1862.251 grammes or 28,758 half chalci or Troy grains, giving 479.3 Troy grains to the ounce, which is according to Form 15. Talent divided by 120.
49.	Exact.	NICE. Kelly, p. 269.	Pound.	Commercial (talent divided by 120) : 311.6 grammes, 4800 grains or half chalci of Form 15 (4809 Troy), 10 ounces as above, but divided however into 10 ounces.
50.	Exact.	TRIPOLI (Barbary), 7680. Kelly, p. 379.	Rottolo.	(Talent divided by 75) : 497.6 grammes, 7680 grains or half chalci, Form 8 (7680 Troy), 16 ounces of 10 drachms to ounce, 16 kharouba to drachm—there would then be 3 half chalci or Troy grains to the kharouba.
51.	Exact.	TRIESTE and VIENNA, 8192. Kelly, p. 336.	Pound.	Commercial 559.6. This is 1½ pound Troy, divided however into 16 ounces instead of 18; there are 512 pfenings in it, so the ½ chalci would be 8192, Form 9, instead of 8640 half chalci, Form 8, and there would be 16 half chalci in the pfening, or .06831 grammes each. Each half chalcos is divided into 16 parts, making 131,072 right pfenings in all.
52.	Exact.	VERONA. Kelly, p. 348.	Peso.	Grosso (talent divided by 75) : 497.343 grammes (7676 Troy), or half chalci 7680, Form 8). This is 16 ounces of Troy pound.
53.	3 grains.	CHINA, 1000. Kelly, p. 67.	Catty.	Of 16 tales of 37.566 or 576 grains or half chalci, so there are in the tale 576 grains instead of 480, *i.e.*, 12×48, instead of 10×48, which is our Troy ounce, but the tale is divided decimally into 1000 cash. The tale is therefore the 10th part of the Eginetan or Troy pound, and as there are 1000 cash in it, there must be 1,000,000 cash in the Eginetan talent; it is evidently therefore divided in Egyptian manner (see Form 16).
54.	Exact.	EMBDEN. Kelly, p. 126.	Pound.	Commercial (talent divided by 75) : 496.8 grammes, 8192 grains or half chalci, Form 9 (7668 Troy), 16 ounces.
55.	Exact.	MUNICH. Kelly, p. 261.	Pound.	Commercial, 560.839 grammes, 8640 ½ chalci grains, Form 8 (8656 Troy). This is 18 ounces of Form 8.

	Error.	Place.	Weight.	Talent of 37,320 grammes.
56.	Exact.	FIUME. Kelly, p. 128.	Funti.	Weight, 558.7 grammes, 9216 half chalci or grains of Form 9 (8623 Troy), being a pound and a half divided into 16 ounces of 576 half chalci to the ounce.
57.	2 Troy grains out in ounce.	BERGEN. Kelly, p. 32.	Pound.	Talent (divided by 75) : 499.61 grammes or 8192 half chalci grains, Form 9 (7716 Troy), 16 ounces.
58.	2 Troy grains out in ounce.	MOCHA, 480. Kelly, p. 257.	Vakia.	One ounce, 30.970 grammes, 480 grains or half chalci of Form 16, but four into ten, *i.e.*, 40 of these ounces or vakia make a maund of 1238.80 grammes : ½ of this is 619.4 grammes, which is the Eginetan or Troy mina of 622 grammes. The talent is divided in the Egyptian way (see *ante*).
59.	2½ Troy grains out in ounce.	COPENHAGEN. Kelly, p. 76.	Pound.	Commercial (talent divided by 75): 500.71 grammes, 8192 grains or half chalci of Form 9 (7720 Troy), 16 ounces or 512 of 16 or 256 of 32 (*see* China, No. 53).
	Ditto.	BOLSANO. Kelly, p. 45.	Pound.	Commercial, 500.6 grammes, same positive weight.
60.	6 Troy grains out in ounce.	ALEPPO.	Metical.	Or drachma, 4.729 (the Eubœan is 4.665) grammes 72 grains (73 Troy).
61.	...	ALGIERS.	Metical.	80 of these make the pound of 5760, Form 8.
62.	Exact.	LUCCA, 6912. Kelly, vol. ii, 226.	Peso.	Grosso (talent divided by 100) : 373.48, 3456 chalci (5763 Troy). Divided into 12 ounces of 288 denarii and 6912 grani or half chalci, Form 10, *i.e.*, 24 grains or 12 chalci to each denarius, divided like the Anglo-Saxon division. The half chalci would be .054 grammes.
63.	Exact.	BREMEN. Kelly, p. 49.	Pound.	Commercial (talent divided by 75): 498.25 grammes (7690 Troy), 7680 half chalci of Form 8. Divided into 16 ounces and 512 "orts", giving 15 half chalci to "ort."

The Ethiopian and Egyptian Talent of 34,016 *grammes, or* 52,500 *Troy grains.*

The identity of this is fully proved in two ways. Firstly, from the Farnesian Congius, or the brass vessel formerly in the collection of Alexander Farnese, and which bears the old Roman inscription

IM P. CÆSARE
VESPES VI
T. CAES. AUG. F IIII^{cos}
MENSURÆ
EXACTÆ IN
CA PITOLIO
P. X

The contents of this filled with distilled water weigh exactly 3401 grammes. Secondly, from the inscription in the "Stele" of Barkal in the Museum of Bulag, where it appears that there was in Ethiopia a provincial weight-system of which the unit was a very small weight named a Pek, weighing 0.71 or 0.709 grammes. Now taking this unit to be or to indicate 10 chalci of .0709 grammes, and reckoning 480,000 to the *talent* in the usual way, we get the talent as before, 34,032 grammes. This weight is of peculiar interest to us in England; the Romans might have got it from Egypt, unless it existed in Italy before their advent to power, which is possible and probable, as it still exists there, as well as the Roman pound of 327.44 grammes.

	Error.	Place.	Weight.	Talent = 34,016 grammes.
64.	Exact. The ounce is 28.3463 grammes.	ENGLAND, 7680. Jeakes.	Pound.	Avoirdupois (talent divided by 75): 453.544 grammes or 7680 chalci of Form 8 (7000 Troy), 480 in the ounce —16 ounces. I have taken this division from "Jeakes' Arithmetic, Surveyed and Reviewed," London (1596), thus: "*The avoirdupois pound was parted in* 16 *ounces, every ounce into* 8 *drachms, and every drachm into* 3 *scruples, and every scruple into* 20 *grains.*" One of the pounds dug up at Herculaneum, described by Bayardi, weighed exactly 452 grammes.
65.	Exact.	ENGLAND. Kelly, p. 220.	Provincial.	Pound, 510 grammes (18 ounces), or 8640 chalci, Form 8. This is to be found in the counties of Cheshire, Cornwall, Devonshire, Dorsetshire, Gloucestershire, Herefordshire, Lancashire, Lincolnshire, Staffordshire, North and South Wales, and Westmoreland—see Government Report, but at Nuremberg, No. 73, the same weight is divided into 16 ounces.
66.	Exact.	ENGLAND. Kelly, p. 220.	Hundred	Weight that is 100 of the provincial pound. Of course a *hundred weight* could never be 112 pounds, but it must mean one hundred of some well-defined weight, and 51,000 grammes is exactly 112 avoirdupois pounds. Moreover, a stone weight of exactly this amount of 510 grammes was dug up by Mr. Layard in the ruins of Nineveh (*see* Norris).
67.	Exact.	FLORENCE, 6912. Kelly, p. 130.	Libra.	Talent (divided by 100): 339.5 grammes, 6912 grains ($\frac{1}{2}$ chalci), Form 10 (or 5240 Troy), 12 ounces of 288 denarii of 24 half chalci.
	...	LEGHORN, 6912.	...	Do.

	Error.	Place.	Weight.	Talent = 34,016 grammes.
68.	Exact.	MADRAS. Kelly, vol. ii, p. 223.	Star.	Pagoda weight, 3.401 grammes, 52.5 Troy. This is the drachma of the talent divided by 10,000, and of a pound divided by 100, and equals the Roman pound of 327.48 divided by 96 almost—8 of them going to the ounce, but 34,010 grammes existed as a separate talent in Asia, and Egypt, and in Egypt would be divided as in Form 16.
69.	6 Troy grains out in ounce.	PORTUGAL, 4608. Kelly, p. 211.	Marco.	Of 8 ounces, 229.46 grammes, as divided at Florence into 192 Escropulos or 4608 graos or ½ chalci, Form 10 (3541 Troy), 192 +96 = 288: 8+4 ounces = 12. *See* No. 71. Half chalcus=.0498.
70.	1⅓ Troy grains out in ounce.	ROME, 6912. Kelly, p. 293.	Libra.	Talent (divided by 100): 339.121 grammes, 6912 grains or ½ chalci, Form 10 (5234 Troy), 12 ounces of 24 denarii of 24 half chalci of .04906.
71.	6¼ Troy grains out in ounce.	SPAIN, 4608. Kelly, p. 320.	Marc.	Of *eight* ounces, 230.043 grammes, 4608 grains or ½ chalci, Form 10 (3550 Troy), divided into 64 orchatos and 384 tomines of 12 grains. Gold is weighed by 10 ounces (not 12) of Form 8 = 4800 half chalci (*see* No. 69). Half chalcus = .04992.
72.	5 Troy grains out in ounce.	GENEVA, 8640. Kelly, p. 153.	Poids.	Foible (talent divided by 75): 458.831 grammes, 8640 grains or ½ chalci, Form 8 (7081 Troy), divided into 15 ounces of 24 deniers or 576 grains=18 ounces of 20 deniers or 480 grains. There is another weight of 18 ounces of 24 deniers to ounce.
72. (*a*)	2¼ Troy grains out in ounce.	LUCCA, 6912. Kelly, p. 224.	Peso.	Sottile (talent divided by 100): 337.77 grammes, 6912 grains or ½ chalci of Form 10, 12 ounces of 576 to ounce (5213 Troy).
73.	Exact.	NUREMBERG Kelly, p. 271.	Pound.	Of two marks, 509.9 grammes, 12,288 half chalci or 6144 chalci or grains, Form 14 (7870 Troy), 18 ounces, or a pound and a half divided into 16 ounces of 512 pfenings of 24 half chalci. This weight of 510 grammes has been dug up at Babylon (*see* Layard's *Nineveh and its Remains*), and is the pound one hundred of which is our hundred-weight. *See* No. 65.
74.	Exact.	PADUA, 6912. Kelly, p. 275.	Libra.	Sottile (talent divided by 100): 340.158 grammes or 6912 grains or ½ chalci, Form 10 (5250 Troy), *See* Venice. Kelly, p. 346.
75.	Exact.	RATISBON, Kelly, p. 286.	Pound.	Commercial (talent divided by 60): 568.6 grammes, 10,240 grains or half chalci, Forms 2 and 9 (8777 Troy). This is the mina of the talent, and sixty of it give 34,116 grammes as the talent. Twenty ounces divided into 16 ounces or 512 pfenings of 20.

	Error.	Place.	Weight.	Talent = 34,016 grammes.
76.	Exact.	ROSTOCK. Kelly, p. 296.	Pound.	Town standard for commercial dealings with Russia, 508.7 grammes, 8640 grains or half chalci, Form 8 (7852 Troy), 18 ounces avoirdupois. The Babylon weight, see England, *ante*.
77.	Exact.	SWEDEN. Kelly, p. 329.	Victualie	Weight 425.2. Eighty of this make the talent of 34,016, and there was a weight dug up at Herculaneum (see Bœckh, p. 182) weighing nearly 42,700, which evidently represents one hundred of these victualie weights.
78.	Exact.	SWEDEN. Kelly, p. 329.	Pound.	Metal or exportation, weight 340.1. One hundred of this make the talent, or 34,010 grammes.
79.	Exact.	MADRAS. Kelly, vol. ii, p. 223.	Star.	Pagoda weight 3.401 grammes. Ten thousand of this is the talent.
80.	Exact.	ALEXANDRIA Kelly, p. 4, & vol. ii, p. 224.	Rottoli.	Forfori (talent divided by 80), *i.e.*, 423.869 grammes or 6542 Troy.

NOTE.—The drachmæ of the talent of 34,010 grammes (*i.e.*, one hundred of 3.401) is not to be confused with the drachmæ of 3.41, which arises on the division of the Roman pound of 327.44, when divided by 96. This last is spoken of in Cleopatra's tables (C.X.) as one of the 128 drachmæ, in the following passage: "The mina has 16 ounces, 128 drachmæ, 384 grammata, 768 oboli, 1,152 thermoi, 2,304 ceratia, 6,144 chalci." 128 drachmæ of 3.41 grammes give 436.6 grammes, which is the attic mina, or Roman pound of 327.44 + ⅓, or 16 ounces. The computation of the chalci in this passage completely coincides with Form 14. The mina of 436.6 is Fleta's libra mercatoria (*see* No. 18).

The Asiatic (Persian ?) Talent of 32,744 *grammes, or* 505,371 *Troy grains. The hundredth part of this is* 327.44 *grammes, or* 5,053 *Troy, and this is the Roman Pound.*

This talent and pound, which still exists in Italy, is not to be confused with another pound of 340.1, also still existing in Italy —they have often been so confused. The talent of 32,744 grammes, its Asiatic origin, and its hundredth part or Roman pound, is identified in various ways. Xenophon, in his *Anabasis*, 1, 5, 6, gives the "siglus" as seven and a half Attic obols. The Attic obol (see *ante*) was .72775 grammes (taking 4.3665 grammes, Hultsch's estimate of the Attic drachma, and the sixth of it, the obol, in the usual way) and seven and a half of the obol would give 5.45812 grammes as the corresponding Asiatic drachma of the minah, and 6000 of these (see Form *ante*) gives 32,744 as the talent and 327.44 as the pound. This weight is confirmed again thus: Pliny, xxxiii, 46, states the "aurei" to be at the rate of 40 to

the pound ; now several of these aurei are still in existence—there is one in the Bodleian, of the time of Julius Cæsar, weighing 126.5 Troy grains ; and one of Antony of 126 grains, and Raper speaks of many more—taking the mean of these 126.25 grains and multiplying that by 40 gives 5050 as the Roman pound. This weight is also confirmed by the weight of the scripular aurei, the weight of which (as the result of accurately weighing them) M. Letronne, *Sur l'Evaluation des Monnaies grecques et romaines*, puts at 21.368 French *grains*, or 17.52 Troy grains ; this multiplied by 288, the number of scripula in the pound, give 5045 Troy grains in the pound. It is well known that the Romans divided their pound into denarii, or drachmæ, at different times, in different ways ; thus, before Hannibal's time, by 72, after then to Nero's time, by 84, then by 96, and afterwards by 72 again, thus :—

	Error.	Place.	Weight.	Talent = 32,744 grammes.
81.	Exact.	ROME, Old.	Pound.	(Talent divided by 100): 327.44 grammes of 1728 siliquæ or double chalci, or 6912 half chalci, Form 10 (5053 Troy grains). This is the pound divided by 72 with 6 drachmæ of 4.547 grammes to the ounce—the talent consisting of 1200 ounces. Nos. 84, 86, 88, 90, 92, are existing examples of this division of the pound, etc., in Italy.
82.	Exact.	ROMAN, Old.	...	(Talent divided by 100): 327.44 grammes, divided by 96 in 96 drachmæ, or 12 ounces of 8 drachmæ of 3.41 to the drachma. A passage of Pollux states this to be 8 drachmæ to the ounce. As every drachma is supposed to contain 48 chalci, there would be (12×8) $96 \times 48 = 4608$ chalci. This is fully confirmed by the same passage, which tells us that 18 ceratia go to the drachma, and $2\frac{2}{3}$ chalci to the ceration, and $96 \times 18 \times 2\frac{2}{3}$ do. make 4608 chalci, which is well represented thus, $\frac{4608}{1728}$, Forms 8, 10, and 14, and so fully confirms my statement as to the origin of "grains".
83.	Exact.	ROMAN, Old.	...	327.44 grammes divided by 84 into 84 denarii of 3.898 grammes. This is clearly shown in the description given by Pollux of the Italian mina, or Fleta's libra mercatoria of 15 ounces (talent divided by 75, *i.e.*, 436.6 grammes), which he, Pollux, states to be 112 drachmæ $(112 \times 3.898$ grammes, *i.e.*, $327.44 + \frac{1}{3}$ or 109.146, *i.e.*, 436.586 grammes). This is the attic mina, *i.e.* a pound and a third or 16 ounces

	Error.	Place.	Weight.	Talent of 32,744 grammes.
				(84+28 = 12+4 ounces), or 4,032 chalci + 1344 = 5376 half chalci. He states the ounce to be 7 drachmæ. Taking the drachma to contain 48 chalci, as it always did, the number of the chalci in the mina would be (84 × 48) 4032 chalci, and in the 4 ounces 1344, Form 13. If the mina was divided according to Form 10, it would contain 3456+1152 chalci, or 4608 of that Form 10, or 384 denarii of 12 chalci of that form, instead of 288 of 14 of Form 13, as suggested in the forms. It will be seen how well this division of the pound corresponds, as suggested at page 263 of my *Domesday* paper, with the rod of 14 feet. See next case. See No. 86. *See* note after No. 80 and Nos. 18, 85
84.	...	ITALIAN.	Mina.	491.16 grammes being a pound and a half of 5184 chalci or 2592 siliquæ, thus described in Discorides Kuhn's *Collections*, xiii, 775: "The mina, according to the Italian authority, is 18 ounces, *i.e.*, a pound and a half, 144 drachmæ; but the Alexandrian mina is 20 ounces, that is 160 drachmæ," which is the mina I have described immediately after this, viz., No. 85, so of course the drachma is the same as in No. 82, viz., 3.41 grammes.
85.	Exact.	ROME, Old.	Mina.	545.73. This is the Roman minah, being the sixtieth part of 32,744 grammes (talent) in the usual way, or 8422 Troy, that is 20 ounces, which is described as in Pollux: Kahn's *Collections*, xiii, 751. The half of it still exists in the mark of Barcelona of 272.654 grammes, No. 88.
86.	Exact.	ATTICA, ITALIA, ENGLAND, EGYPT.	Mina.	Talent (divided by 75): 436.6 grammes or 9216 half chalci of Form 10. This is Fleta's libra mercatoria, and is the same as the mina of 16 ounces = talent of 32,744 grammes divided by 75, as alluded to in No. 83, but it is also the talent of 34,928 divided by 80. In No. 83 it is shown by Pollux in the way it was divided by the Romans between Hannibal's time and Nero's. In the present shape I show it as I presume the Anglo-Saxons divided it, and the 6750 Troy grains (see No. 18) represents it as the Normans divided it, taking it at 15 ounces instead of 16; but all these are alike in positive weights. See Forms 4 and 5 and note thereon, and Nos. 11 and 12.

	Error.	Place.	Weight.	Talent of 32,744 grammes.
87.	...	ROMAN, Old, and ALEXANDRIAN.	Mina.	545.7 grammes or talent of 32,744 divided by 60, which is, as Pollux says, 20 ounces (see No. 85). Taking 3456 chalci, or 1728 siliquæ or ceratia, to the pound, Form 10, this will give 144 siliquæ to the ounce, and as 20 ounces make the mina, then 2880 to the mina gives 8 drachmæ to the ounce, there would be therefore 160 drachmæ in the mina, and dividing the 2880 siliquæ by 160, it gives 18 siliquæ or ceratia to the drachma, *i.e.*, just what Pollux makes it when he says, "But the weight or drachma holds 18 ceratia, and others say 3 grammata." 6 siliquæ therefore went to 1 gramma. Of course this is the division of the pound into 96 drachmæ, each of 3.416 grammes, and 20 ounces would be 96 + 64, *i.e.*, 12 ounces + 8 ounces.
88.	Exact.	BARCELONA, 6912. Kelly, p. 27.	Marc.	272.65 grammes, 6912 half chalci of Form 10 (4207 Troy), 10 Roman ounces divided into 8 ounces of 192 adarmes of 18 chalci, or 36 half grains each.
89.	Exact.	FRANCE, 9216. Kelly, p. 133.	Poids.	de Marc, 489.5, one and a half Roman pounds, but divided sexdecimally into 16 ounces, 9216 grains or half chalci, Form 9 (7565 Troy grains). The mark consisted of 128 gros of 72 half chalci, and it was sometimes divided into 3 deniers of 24 half chalci. Half chalcus = .05311 grammes.
90.	Exact.	BASLE, 9216. Kelly, p. 28.	Poids.	Do.
91.	Exact.	BERGAMO. Kelly, p. 31.	Peso.	Sottile, 326.227 grammes. (Talent divided by 100.) Old Roman in 12 ounces. There is another pound of 30 of the same ounces, *i.e.*, 3 pounds of Barcelona, No. 81.
92.	Exact.	BILBOA. Kelly, p. 41.	Pound.	"Light" 489.5, the French poids de marc (see *ante*), No. 82, *i.e.*, a pound and a half old Roman.
93.	4 Troy grains out in ounce.	BOLSANO.	Pound.	"Light" (talent divided by 100): 330.633 (5103 Troy). The old Roman is 327.44.
94.	Exact.	CORSICA. Kelly, p. 80.	Pound.	Commercial old Roman pound and a half, 490.19 grammes, 9216 grains or half chalci, Form 9 (7,565 Troy), in 16 ounces.
95.	Exact.	CREMONA. Kelly, p. 81.	Pound.	327.6 or talent divided by 100. The old Roman pound.
96.	2½ Troy grains out in ounce.	LUNEBERG. Kelly, p. 245.	Pound.	A pound and a half Roman, 488.59 grammes, 8192 grains or half chalci, Form 9 (7540 Troy), divided into 16 ounces or 512 pfenings of 16 or 256 of 32 (see Hamburg, No. 23).

	Error.	Place.	Weight.	Talent of 32,744 grammes.
97.	Exact.	MILAN, 6912. Kelly, p. 255.	Libra.	Sottile (talent divided by 100) : 326.8 old Roman pound of Form 10, 1728 double chalci, or 6912 grains or half chalci (5044 Troy), divided into 12 ounces or 288 denarii of 24 half chalci.
98.	...	NEUFCHATEL Kelly, p. 269.	Poids.	Marc of 7555 Troy grains (see France, No. 82).
99.	Exact.	REGGIO. Kelly, vol. ii, p. 227.	Libra.	Talent (divided by 100): 329.921 Roman pound of 6912 (half chalci) grains (5092 Troy). See Milan, No. 90.
100.	4 Troy grains out in ounce.	ZELL. Kelly, p. 373.	Pound.	486.6 grammes, 9216 half chalci or grains, Form 9 (7511 Troy), one and a half of the Roman pound.
101.	Exact.	RUSSIA. Kelly, p. 301.	Pound.	(Talent divided by 80) : 409.3 grammes or 9216 half chalci, Form 14, divided into 96 solotnicks. 80 of these pounds of 327.44 (6318 Troy) make the talent.
102.	1 grain out in ounce.	MARSEILLES, 9216. Kelly, p. 252.	Poids.	The table (talent divided by 80): 407.95 grammes or 9,216 half chalci, Form 10 (6296 Troy), divided into 16 ounces of 128 gros.
103.	1¼ grains out.	SCOTLAND. Kelly, p. 309.	Pound.	Commercial, one and a half Roman pounds, 492.419 grammes, 7680 half chalci, Form 8 (7600 Troy), 16 ounces of 16 drops = 256 of 30 grains.
104.	Exact.	AMSTERDAM, 5120. Kelly, p. 9.	Mark.	or 9 ounces (Dutch Troy) of old Roman, 246.084, 5120 half chalci of Form 12, divided into 8 ounces, and the ounce into 20 engels or esterlins, and the engel into 32 azen or aas. It will be seen that the Scotch is virtually double this.
105.	Exact.	OLD HEBREW.	Talent.	40,930 grammes. This is 100 of the Russian pound *ante*, (No. 95). In the Latin version of Epiphanius it is thus spoken of: "Talentum super omnia pondera quibus alia appenduntur excellit. Exsistit vero cxxv librarum hoc autem ab Assyriis cepit dicunt enim quod Abraham in terram Chanaan hanc advexerat formam talenti autem centesima vicentesima quinta pars cxxv una libra est." If 40,930 grammes is divided by 125 it produces the Roman pound of 327.44 grammes. It is to be found in Petavius 183, and in Cleopatra's tables it is stated thus : "The talent holds 125 pounds of nomismata 9000." Now if the pound is divided as it was divided in the earliest times, and again at Constantine's time, into 72 nomismata, drachmæ, or denarii, then 125 × 72 will give the 9000 nomismata. In another place in

	Error.	Place.	Weight.	Talent of 32,744 grammes.
				Cleopatra's tables this mina is said to have 15 ounces and 90 drachmæ; now 15×27.28 (Roman ounce) does make the mina of 409.3, and this, if divided by 90, gives the drachma of 4.54 grammes, which is, of course, the drachma of the Roman pound ÷ 72, for 15 ounces is to 12 ounces as 90 is to 72. Again, if the pound was divided into 96 nomismata, there would be 12,000 of such nomismata of 3.41 grammes. Now the Hebrew shekel or weight was 4 drachmæ, or half the ounce when it contained 8 drachmæ or 96 to the pound instead of 72, so there would be 24 shekels in the Roman pound and 3000 in 125 pounds, which perfectly coincides with Genesis xxiv, 22; that passage states the kikkar or talent to be 3000 shekels; this was the "profane" talent, but the "talent of the sanctuary" was just double—see Ezekiel xlv, 2, where it is said to consist of 6000 shekels, *i.e.*, 81,860 grammes. Taking the calculations according to Form 16, the maneh would be 60 and the talent 6000 shekels.

The Common Syrian Talent of 32,109 *grammes.*

The identity of this is proved by certain weights recently found in Syria, and inscribed as "Demosion Hemimnaion". They are of brass, and the half-part weighs 535.15 grammes; *see* Longperrier in *Annals Instit. Arch.*, vol. xix (1847), p. 340. Multiplying this mina to find the talent 60 × 535.15, it gives 32109 as the talent.

	Error.	Place.	Weight.	Talent of 32,109 grammes.
106.	Exact.	CONSTANTINOPLE, 6400. Kelly, p. 377.	Checques	or Pound. (Talent divided by 100): 320.75 grammes or 100 drachms of 3.2075, 6400 chalci or 1600 Kharouba of 4 chalci of Form 16 (4950 Troy), divided into 10 ounces.
107.	Exact.	SMYRNA, 6400. Kelly, p. 315.	Checques	The same. 321.2 grammes.
108.	Exact.	NAPLES, 7200. Kelly, p. 264.	Libra.	(Talent divided by 100): 320.75 grammes, 7200 acini or half chalci (4950 Troy), divided into 12 ounces or 360 trapezi, 7200 acini, Form 16. This is evidently the Western division of the same Egyptian weight that we have above at Constantinople.

	Error.	Place.	Weight.	Talent of 32,109 grammes.
109.	Exact.	MAJORCA. Kelly, p. 247.	Rottolo.	Commercial (talent divided by 80): 400.026 grammes or 9000 half chalci, Form 16. This is 15 Neapolitan ounces, *i.e.*, the eightieth part of the talent of 32,075 grammes (or 495,000 Troy), divided into 12 ounces of 750 Neapolitan acini to the ounce (instead of 600) = 9000 of Form 10, as at Barcelona, below.
110.	$1\frac{7}{12}$ Troy grain out in ounce.	PATRAS. Kelly, p. 276.	Pound.	Talent (divided by 80), that is, 399.637. Practically the same as Majorca, and divided into 12 ounces of half chalci of Form 16 = 6168 Troy.
111.	1 Troy grain out in ounce.	BARCELONA, 6912. Kelly, p. 27.	Pound.	Commercial (talent divided by 80): same as Majorca, 400.63 of 9000 grains or half chalci, Form 16 (6174 Troy), divided into 12 ounces or 6912 half chalci, Form 10.
112.	$1\frac{7}{12}$ Troy grain out in ounce.	MODENA. Kelly, p. 258.	Pound.	Commercial (talent divided by 100): 319.5 grammes of 7200 grains or half chalci, Form 16 (4931 Troy), divided into 12 ounces.
113.	Exact.	GALICIA, Spain. Kelly, p. 150.	Pound.	Commercial, 576.122 grammes or 1800 drachms of 3.2005 or 115,200 half chalci, Form 16 (8892 Troy), divided into 20 ounces.
114.	Exact.	PERSIA. Kelly, p. 277.	Batman.	of cherray is 5751.22, being 1800 drachms of 3.195. This is divided into 6 rottols of 300 drachms, so it would consist of 115,200 half chalci of Form 16 (or 88,771 Troy).
115.	$1\frac{1}{4}$ Troy grains out in ounce.	PRAGUE. Kelly, p. 281.	Pound.	Commercial, 514.4 grammes, 160 of the drachm of 3.20 grammes, divided into 16 ounces or 7680 half chalci of Form 8 (or 7940 Troy).

In order to make the application of the tables and remarks therein more easy to understand, it is necessary to observe that though a drachma always consisted of 48 chalci, and was usually divided by the Greeks into 6 oboli, each of 8 chalci, yet sometimes a drachma was, according to Diodorus, Photius, and others, divided into 8 oboli of 6 chalci, so that a weight of 80 Attic drachmæ or 3840 chalci, or 7680 half chalci, Form 12, might be divided into 480 oboli of 8 chalci each, or into 640 oboli of 6 chalci each (that is, 960 hemioboli of 4 chalci each, or 1280 hemioboli of 3 chalci each); and the same weight would thus contain 240 units of 4 hemioboli of 4 chalci each, or 256 units of 5 hemioboli of 3 chalci each, or 256 of 30 half chalci, *i.e.*, the divisions of the 3840 and the 7680 would be made just as they are made at Leipsic, Berlin, Konisberg, Nos. 20, 24, 26, etc. These units are called denarii in

the entries in *Domesday Book* 'inter Ripam'. A drachma also contains 3 scruples. The Tower pound is 80 Attic drachmæ) see *post*) and the Troy pound is 80 drachmæ, each a fifteenth heavier than the Attic drachma. Such a weight can be divided into 8 solidi of 10 drachmæ, or into 10 solidi of 8 drachmæ, or into 12 solidi of 8 smaller drachmæ, *i.e.*, into 8 solidi of 120 hemioboli (mancus) with 8 chalci to the obolus = 8 solidi of 160 hemioboli of 6 chalci to the obolus, or into 10 ounces of 24 scruples, or into 12 ounces of 24 smaller scruples. If we allow 2 small solidi to each large solidus and to each ounce, we shall have in the 80 drachmæ 16 solidi of 60 hemioboli (15 dioboli), or 80 hemioboli (16 × 5 hemioboli of *three* chalci), 20 solidi of 12 scruples, or 24 solidi of 12 scruples of smaller grains: read denarii for scruples and dioboli, and there is the solution of the entries in *Domesday* 'inter Ripam' and the puzzle contained in Guthrum's Treaty. If the Troy pound was used in that Treaty, and the 80 Attic drachmæ consequently raised by one fifteenth, this addition could be carried out by adding $\frac{1}{15}$ to the weight of each grain in every unit composed of grains, or by adding $\frac{1}{15}$ in numbers to any one group of such units—viz., by raising the number of wheat grains from 30 to 32, keeping the weight of grains the same, or by raising the 16 solidi of 15 to 16 solidi of 16 (*see* Note to Form 12). In the entry in *Domesday* 'inter Ripam', the Mercian solidi are 16 of 16 of 30 grains of .0486 gramme, instead of 16 of 16 of 30 grains of .0455625; but in Guthrum's Treaty the unit itself is raised from 30 wheat grains to 32 of the same grains .0486, and the 16 solidi of 15 of 30 such grains become 16 solidi of 15 of 32 grains—*i.e.*, 48 sol. ex. v. scl. denariis, each denarius being 32 wheat grains (*i.e.*, the Troy penny of 24 Troy grains). That the words 'aureus' and 'solidus' were synonymous, see *Leges Agrariæ*, p. 323.

ATTIC DRACHMA, 4.373 GRAMME.

No. 1. (*Grammes* 349.87.) *Tower pound of* 5400 *Troy grains or* 80 *Attic drachmæ of* 4.373.

No. of Troy grs.	No. of gram.								
0.703125	.0455625	Wheat = ½ Chalcus of Form 12.							
1.40625	.091125	2	Chalcus.						
4.21875	.273375	6	3	Hemiobolus.					
8.4375	.54675	12	6	2	Obolus.				
21.09375	1.366875	30	15	5	2½	Denarius.			
84.375	5.4675	120	60	20	10	4	Thrimsa.		
337.5	21.87	480	240	80	40	16	4	Solidus or aureus.	
675	43.74	960	480	160	80	32	8	2	Two aurei or 10 drachmæ.
5400	349·92	7680	3840	1280	640	256	64	16	8 (Libra of 80 drachmæ.)

This is according to Forms 11 and 12. Equals 60 Thrimsæ of 5.832 grammes.

No. 2. (*Grammes* 349.87). *Tower pound. Decimal division into* 60 *Thrimsæ,* 80 *Attic drachmæ of* 4.373 *grammes.*

No. of Troy grs.	No. of gram.							
0 703125	.0455625	Wheat or half chalcus, Form 12.						
1.40625	.091125	2	Chalcus.					
11.25	.729	16	8	Obolus.				
22.5	1.458	32	16	2	Denarius (3=drachma).			
90*	5.832*	128**	64	8	4	Thrimsa**=120 of .0486 gramme.		
270	17.496	384	192	24	12	3	Solidus.	
5400	349.92	7680	3840	480	240	60	20	Libra (60 Thrimsæ).
				or				
90*	5.832**	128	64	8	4	Thrimsa (**= 120 of .0486).		
450	29.16	640	320	40	20	5	Solidus or uncia.	
5400	349.87	7680	3840	480	240	60	12	Libra (60 Thrimsæ).

This is according to Forms 11 and 12.

No. 3. (*Grammes* 349.87.) *Tower pound as above, Saxon division,* 80 *drachmæ of* 4.373 *grammes.*

No. of Troy grs.	No. of gram.							
0.781	.050625	Wheat 12 ½ Chalcus.						
3.124	.2025	4	Carat or Double Chalcus or Siliqua; *see* Form 10.					
9.372	.6075	12	3	Obolus.				
18¾	1.215	24	6	2	Penig or scruple.			
56¼	3.645	72	18	6	3	Drachma of 3·645.		
75	4.86	96	24	8	4	1⅓	Scilling or solidus.	
450	29.16	576	144	48	24	8	6	Ounce of 24 peninga.
5400	349.87	6912	1728	576	288	96	72	12 Libra of 96 drachmæ of 3.645 or 80 of 4.373.

This is according to Form 9. Equals 60 Thrimsæ of 5.832 grammes.

No. 4. (*Grammes* 373.2) *Troy pound* 80 *Eubœan drachmæ. Mercian sexdecimal division into* 64 *thrimsæ and into* 8 *oboli of* 6 *chalci each to the drachma. Troy grain* = .0648 *of a gramme.*

No. of Troy grs.	No. of gram.							
.75	.0486	Wheat grains or ½ Chalcus.						
1.5	.0972	2	Chalcus.					
4.5	.2916	6	3	Hemiobolus.				
22.5	1.458	30	15	5	Denarius.			
90	5.832	120	60	20	4	Thrimsa.		
360	23.328	480	240	80	16	4	Solidus or aureus (ora) denariorum.	
720	46.656	960	480	160	32	8	2	Mancus, "2 oræ denariorum" or 10 drachmæ.
5760	373.248	7680	3840	1280	256	64*	16	8 (Libra of 80 drachmæ of 4.6656).

This is according to Forms 11 and 12.

* *See* No. 5.

TROY POUND.

No. 5. (*Grammes* 373.248) 80 *Eubœan drachmæ of* 6 *oboli of* 8 *chalci to drachma. Troy grain* =.0648 *gramme. Treaty division between Alfred and Guthrum*

No. of Troy grs.	No. of gram.						
.75	.0486	Wheat grain or ½ Chalcus of Form 12.					
1.5	.0972	2	Chalcus.				
12	.7776	16	8	Obolus.			
24	1.5552	32	16	2	Denarius or penny.		
120	7.776	160	80	10	5	Solidus "ex 5 scil. denariis"; *see* Treaty.	
720	46.656	960	480	60	30	6	Mancus or 10 drachmæ.
5760	373.248	7680	3840	480	240	48	8 (Libra of 80 drachmæ of 4.6656).

Equals 64 thrimsæ of 5.832 grammes; so that in the Ceorls "were" of 4 pounds and 40 pence of this division there are 266⅔ thrimsæ. (*See* Guthrum's treaty set in my paper in vol. i, *Domesday Studies.*)

No. 6. (*Grammes* 373.248) 80 *Eubœan drachmæ decimal division into* 6 *oboli of* 8 *chalci to the drachma. Troy grain* = .0648 *gramme.*

No. of Troy grs.	No. of gram.							
.75	.0486	Wheat grain or ½ Chalcus of Form 12.						
1	.0648	1⅓	Troy grain.					
1½	.0972	2	1½	Chalcus.				
12	.7776	16	12	8	Obolus.			
24	1.5552	32	24	16	2	Diobolus or penny.		
120	7.776	160	120	80	10	5	Solidus "ex 5 scil. denariis"; *see* Treaty.	
480	31.104	640	480	320	40	20	4	Aureus, solidus, or "ora de viginti in ora" or ounce.
720	46.656	960	720	480	60	30	6	1½ Mancus or 10 drachmæ.
5760	373.248	7680	5760	3840	480	240	48	12 8 Libra or 80 drachmæ of 4.6656.

Equals 64 thrimsæ of 5.832 grammes.

No. 7. *Roman, Anglo-Saxon, or Duodecimal divisions.* (*Grammes* 373.248) 80 *Eubœan drachmæ of* 4.6656 = 96 *drachmæ of* 3.888, 6 *oboli of* 3 *carats to drachmæ.*

No. of Troy grs.	No. of gram.								
5/6	.054	Wheat ½ Chalcus of Form 10.							
3⅓	.216	4	Carat.						
10	.648	12	3	Obolus.					
20	1.296	24	6	2	Diobolus, scruple, penny.				
60	3.888	72	18	6	3	Drachma.			
120	7.776*	144	36	12	6	2	*	"Solidus or sicilicus ex 5 sch. denariis"; *see* decimal division above.	
480	31.104	576	144	48	24	8	4	Aureus, solidus, or "ora de viginti in ora" = ounce.	
720	46.656	864	216	72	36	12	6	1½ Mancus or 12 drachmæ.	
5760	373.248	6912	1728	576	288	96	48	12	8 Libra or 96 drachmæ of 3.888 = 80 drachmæ of 4.6656.
A		B							

Column A is the same as Apothecaries' weight, being the same as B, but with half chalcus or Troy grain of 0.648 instead of the half chalcus Form 10, .054, the latter being ten-twelfths of the Troy.

It is thus absolutely necessary, as stated in my paper in vol. i, to have a correct understanding of the difference in number and weight of the primary units which lie at the base of any given ounce or pound, whatever name such units may bear. In the East, at Constantinople the Kharouba (carob, siliqua, or carat) of .20108 gramme consisted of 4 wheat grains or half chalci, each of .05027 gramme, and at Tripoli and Bassora the Kharouba of .1944 gramme consisted of 3 Troy grains or half chalci of .0648 gramme each: supposing, however, the Kharouba at Tripoli and Bassora to have equalled 4 wheat grains as at Constantinople, then the Tripoli wheat grain or half chalcus must have been .0486 gramme, being the identical wheat grain (or ½ chalcos of .0455625 + $\frac{1}{15}$ of it: see below (of the Mercian pound or double mark of 7680 such grains). (See vol. i, p. 233.) The wheat grains of the Troy pound are said in the Statute of Edward to be "medio spicæ", those of the Tower pound are in Fleta, Book ii, c. 12, said to be "mediocria".

The Roman unit, siliqua, or carob, consisted of 4 half chalci, and the half pinginn consisted also of 4 half chalci, whatever their respective weights might have been.

We know as an absolute fact that the Tower pound is 5400 Troy grains, and that the Troy grain is .0648 of a gramme; the weight, therefore, of the Tower pound is 349.92 grammes; the Troy pound we also know to be 5760 Troy grains (that, is 373.248): the difference between the two pounds, therefore, is one *fifteenth*, the Tower pound being 349.92 grammes.

Hultsch (p. 705), as I have said, gives the weight of the *Attic drachma* at 4.366, which would therefore consist of 48 chalci of .091 each, or 96 halves of chalci of .0455 gramme. Taking *ten* drachmæ to an *ounce*, we shall have an ounce of 43.66 grammes, consisting of 480 chalci or 960 halves of chalci. Taking again 8 of these ounces, we have 3840 chalci or 7680 halves of chalci of .0455 gramme and an Attic 'mark' of 349.28, being, with a difference of only 10 grains (Troy), an amount so near to the Tower pound of 349.98 as to justify an assumption that the Attic 'mark' and the Tower pound are identical. This mark of 8 ounces of 43.66 each would therefore equal 16 ounces of 21.83 of 480 halves of chalci each, or 12 ounces of 640 halves of chalci each (=29.16).

Assuming, then, that the ounce of the Tower pound of 5400 Troy grains (which equal a 'mark' of 8 ounces of 10 Attic drachmæ each) was really the ounce of the Anglo-Saxon pound, as it certainly is that of the Cologne and other Teutonic weights mentioned below; and assuming also that the Saxons had the same *divisions* as the Romans and the Irish, as suggested in vol. i. pp.

239, 240, in the paragraph headed 'The Libra and Mercian Mark'; then the Saxon penig would have contained *before* the treaty with Guthrum 24 half chalci, Form 10, of .050625 gramme each, or 20 of .06075 half chalci, Form 8—*see* entries marked D in Tower pound, table *ante* (=18¾ Troy of .0648 gramme, as stated at p. 237), and *after* the treaty (and after this Tower pound for the purpose of the treaty had been raised a fifteenth—that is, from 5400 Troy grains to 5760 Troy grains), would have contained 20 Troy grains (*see* E), six of which would amount to the five denarii which made the treaty shilling, each denarius being 24 grains Troy of .06492 gramme = 32 wheat grains of .0485 gramme, and the *treaty* pound (*i.e.*, the Troy pound) would thus be divided duodecimally by the Anglo-Saxons as in Apothecaries' weight, while the Normans would divide it decimally as in Troy weight, and the Mercians sexdecimally as in the valets of the land 'inter Ripam', at page 248, vol. i. (*See* Tables, *ante.*)

As it is not reasonable to suppose that a weight would be subdivided originally in such a way as to produce a fraction of its primary unit, we may safely conclude that where a subdivision does so produce a fraction it is a subdivision brought about by the adoption of another and different weight. The marks of 8 ounces and 16 halves of ounces (or two thirds of 12 ounces) would represent in the duodecimal system 192 and 384 pence or units, and in the decimal system 160 and 320: but sometimes these marks were themselves divided duodecimally and decimally; for instance, the Attic 'mark' of 8 ounces divides duodecimally up into the Tower pound, and the Mercian mark of 16 solidi divides decimally into the Troy pound as well as duodecimally, as shown above.

As the Attic drachma of 4.3665 (see *ante*), the Tower pound of 5400 Troy grains (equalling 80 of such drachmæ), the chalcos of .091125, the ½ chalcos of .0455625, the wheat grain of .0486, the Troy grain of .064792, are all thoroughly identified, there is very strong ground for thinking (as stated in my paper in vol. i) that there existed in England *before* the advent of the Saxons a weight divided sexdecimally (*i.e.*, 16 × 16 × 30, or 7680 grains); that such grains were halves of chalci of .091125= .0455625; that this weight was the Tower pound divided afterwards by the Anglo-Saxons duodecimally instead of sexdecimally; and that, being 16 × 16 × 30 of .0455625, it equalled *fifteen* ounces of 16 pence of 30 wheat grains of .0486, and that this weight was at the treaty of Guthrum raised $\frac{1}{15}$ (that is, from *fifteen* ounces to

sixteen ounces of such last-mentioned grains) and became what I call the Mercian pound or mark of $16 \times 16 \times 30$ halves of chalci, or wheat grains of .0486 gramme $= 12 \times 24 \times 20$ of .0648 (Troy grains) $= 12 \times 20 \times 24$ of the like grains. The Troy grain is really .064792 but I have taken it as .0648.

The important question remains behind: Did the Saxons when they came to England bring this Attic 'mark' with them, or did they find it here and divide it according to their system duodecimally? For the reason given in my paper in vol i, I think they found it here, and that binary or sex-decimal divisions as contained in the Attic mark were in use among the British in accordance with the like divisions of the land used by Dyvnmal before the Saxons 'obtained the crown of London and the supremacy in England'. The following are the grains or units in grammes: Troy, chalcos, .129584, ditto, .0972, the halves of which are respectively .064792, and .0486 (this last being the wheat grain of Edward's statute).

I cannot conclude this paper without adding a list of the differently sized acres in England; they arise, of course, from the adoption of different-sized feet, expressed by me in mètres. (*See* next page.)

The statute foot is .3048 m. and sesquipedales cubit .4752 m., the half of which is the span of .2286 m. or old British 'foot', on which the pre-Saxon measures are founded. This 'old British foot' is nine statute inches.

The Continental 'Arpents', etc., have not long furrows like the above measure, but are built up on the lines of the 'plethra', 'jugera', and 'hæredia'.

Six × 60 poles of feet in number $\frac{1}{3}$ less than the numbers in column P, $= 4 \times 40$ rods of sesquipedales cubits of that column: thus the statute acre of $4 \times 40 \times 16\frac{1}{2} = 6 \times 60 \times 11$; but they sometimes treated a rod as 'bipedalis': thus $3 \times 30 \times 22 = 6 \times 60 \times 11$: the statute acre in Jersey is so measured (Appendix Gov. Rep. of 1820, p. 26), and is in fact $3 \times 30 \times 24$ of the foot of .2794 m. This might prove a fertile source of error to those who suppose that an acre is necessarily built up of 4×40 of any named rod. So, too, the Devonshire acre is 90 square perches 20 statute feet long (*i.e.*, $3 \times 30 \times 20$) and the West Somerset is 108 (90 Anglico numero), of the like square perches (*i.e.*, $3 \times 36 = 20$). The whole subject of measures and weights deserves a considerable deal more attention bestowed on it than at present it has received, as they are not the result of modern invention, but, on the contrary I should imagine, of very remote times.

Name of Acre.	Stat. yards.	Poles.	Feet.	Foot.[1]	
			P.		
Battle Abbey	4551$\frac{1}{9}$	4×40	16	.3048	This solves the difficulty stated at p. 273 of *Domesday Studies*.
Do. Norman Measure (pied du roi)	4551$\frac{1}{9}$	4×40	15	.325	
Statute (20.1168 m.×201.168 m.)	4840	4×40	18	[1].2794	[1] This is the Jersey foot.
Normandy	9740$\frac{1}{2}$	4×40	22	.325	
Ib.	9740$\frac{1}{2}$	4×40	20	.357	
Irish Plantation, Welsh, Westmoreland, Cumberland, Guernsey, Lancashire, Northumberland, Yorkshire, Derbyshire (Hunts ?)	7840	4×40	18	.3556	
Wales	11776	4×48	20	.357	
Cheshire, Staffordshire, Yorkshire, Leicestershire, Wales, Ireland	10240	8×80	16	.2286	
Merionethshire...	2430	3×40	18	.2286	
Anglesey, Somerset, Hants, Oxfordshire, Hereford, Cardigan, Montgomery, Brecknock, Radnor, Sussex A	3240	4×40	18	.2286	
Irish (4 times A)	12960	4×40	36	.2286	
In stat. cubits	12960	4×40	18	.4572	
North Wales	4320	9×30	16	.2286	
Cornwall, Wilts, Devon, Lancashire, Wales	5760	6×60	16	.2286	
Royal Forest (Sherwood)	25000	10×100	20	.2286	
Devon arable, add ? *once all over England*...	4000	4×40	20	.2286	
West Somerset	4800	4×48	20	.2286	
Lancashire	9000	6×60	30	.2286	
Dumbarton	6084	4×40	18	.3132	
Scotch	6104	4×40	18	.3138	
Scotch	6150$\frac{2}{5}$	4×40	18	.3148	
Lincolnshire	6050	4×40	18	.3123	
= *Hæredium* or 2 jugera	6050	20×20	12	.2963	
Cunningham	6250	4×40	18	.317	
Ireland	14951$\frac{1}{9}$	6×60	20	.2942	
Wales	9384	4×40	20	.350	
Wales	11264	4×48	20	.350	
Leicestershire	2308$\frac{3}{4}$	2×40	16	.307	
Sussex (Osnaburg)	3327$\frac{1}{2}$	4×40	15	.279	110 poles.
Dorsetshire (Amsterdam)	4053$\frac{4}{9}$	4×40	15	.3067	134 poles.
Sussex (Bremen, etc.)	6412	4×40	20	.289	212 poles.
Sussex and Hampshire	5445	6×60	12	.2963	180 poles.
Sussex and Hampshire, $\frac{4}{9}$ of it *short* acre ...	3025	10×20	12	.2963	Jugerum 100 poles.
Sussex and Wiltshire, $\frac{6}{9}$ *short* acre	3630	12×20	12	.2963	120 poles.
Sussex	3932$\frac{4}{9}$	4×40	15	.3026	130 poles.
Irish forrach measure and Russian dessetina	13066$\frac{2}{3}$	12×72	12	.2963	
,, ,, ,, ,,	13066$\frac{2}{3}$	10×60	12	.3553	
,, ,, ,, ,,	13066$\frac{2}{3}$	10×60	14	.3048	

[1] Foot in decimals of a mètre.

O. C. Pell.

TOTEMISM IN BRITAIN.

II.

(*Continued from p. 242.*)

(*h*) *Assumption of Totem Dress.*

MR. FRAZER says that (i) "in order to put himself more fully under the protection of the totem, the clansman is in the habit of assimilating himself to the totem by dressing in the skin or other part of the totem animal." Among the examples he quotes may be mentioned the Minnilarees, who on going to battle dress in wolf-skins, the skin with the tail attached hangs down the back, the man's head being inserted in a hole in the skin, the wolf's head hanging down upon the breast. Amongst the Thinklets on solemn occasions, such as dances, festivals, burials, etc., individuals appear in the full form of their totem-animals.[1] (ii) The North American Indians and others tattoo their totems on their persons; (iii) others paint their totem-marks on weapons, huts, canoes, etc.; (iv) others paint or carve the totem on their clansman's tomb or grave post, and sometimes the stuffed skin of a totem is hung over the grave or placed at the dead man's side.

The well-known passages which refer to the tattooing practices of the early tribes in Britain specially refer to animal figures. Thus the Caledonians and other Picts were tattooed with divers kinds of figures and animals. Cæsar mentions the custom among the Southern Britons, and Solinus says of them that they were marked with the figures of different animals.[2]

To collect together all the customs where animal skins are used as a disguise, or as a part of the traditional costume for the performance of certain ceremonies, is no light task, but at all events, when they are thus brought together, and when an explanation for the strange practice is asked, there does not seem any more fitting explanation

[1] Dormer, *Primitive Superstitions*, 249-253, describes some of these assumptions of the animal form by means of dress.

[2] [Ammianus Marcellinus, *Mon. Hist. Brit.*, p. lxxiii; Eumenius, *ibid.*, p. lxix; Herodian, *ibid.*, p. lxiv; Solinus, *ibid.*, p. x; cf. *Universal History, Ancient*, vol. xiv, p. 75]; Forbes Leslie, *Early Races of Scotland*, ii, 374.

than that they are survivals of old clan festivals, which took place when the clans were totem-clans.

Cæsar notes that the Britons at battle time dressed themselves in the hides and skins of animals. Faustinus the bishop inveighs against the people roaming about in disguises resembling the figures of wild beasts—"alii vestiuntur pellibus pecudum, alii assumunt capita bestiarum, gaudentes et exultantes, si taliter se in ferinas species transformaverint ut homines non esse videantur."[1] Survivals of this general custom still appear in the rural parts of the country. Dr. Johnson, when staying at Coll on New Year's day, relates that "one man dressed himself in a cow's hide upon which other men beat with sticks: he runs with all this noise round the house, which all the company quits in a counterfeit fright." Dr. Plot relates that at Pagets Bromley, in Staffordshire, "a man came along the village on twelfthday with a mock horse fastened to him, with which he danced, at the same time making a snapping noise with a bow and arrow. He was attended by half-a-dozen fellow villagers, wearing mock-deer's heads, and displaying the arms of the several landlords of the town."[2] The curious ceremony of the "fool plough", seems as used at present, says Brand, "a composition made up of the gleaning of several obsolete customs, followed anciently here and elsewhere on this and the like festive occasions".[3] This feature of modern custom is very important to observe; because it not only supplies an explanation of the means adopted for the preservation of ancient ritual, but it meets the objection which might be raised, that it is not correct to pick out one characteristic of a local festival, and, in using it for present purposes, detach it from its surroundings. We now know that modern local ceremonial custom partakes of the nature of a patchwork pieced together from various sources at various times to meet the necessities of a popular traditional demand for periodical festivals. From this traditionally formed patchwork we may note some important items. The representative of the fool in the ceremony of the fool plough was "almost covered with skins, a hairy cap on, and the tail of some animal hanging from his back." He was called "Captain Cauf's tail", and in Yorkshire his tail was "a genuine calf's tail".[4] This custom obtains in Derbyshire with a calf's tail,[5] in Lincolnshire with a fox's tail.[6] Some of the features of the rustic

[1] [Serm. in Kl. Jan, *vide* Du Cange, v. Cervula]; Ellis's *Brand*, i, 515.
[2] *History of Staffordshire*, p. 434.
[3] Ellis's *Brand*, i, 506.
[4] *Ibid.*, i, 505-511.
[5] *Journ. Arch. Assoc.*, vii, 202.
[6] Dyer, *Brit. Pop. Customs*, 42.

sword dance of Northumberland are similar to this, "one of the company is distinguished from the rest by a more antic dress; a fox's skin generally serving him for a covering and ornament to his head, the tail hanging down his back".[1] Morris dancers in the southern parts of Gloucestershire consisted of eight men variously decorated. Two of them danced alone: one wore a light yellow dress and a narrow leather girdle, on which, in the middle of his back, was fixed a bell like a sheep-bell, and he carried the long hair of a cart-horse's tail fixed to a short handle; the other was a man in female attire.[2]

I would connect with these practices a remarkable custom of initiation into chiefship recorded by early writers in Ireland. Mr. Frazer notes that when a Hindu child's horoscope portends misfortune or crime, he is born again from a cow by being passed between the hind-legs of a cow forward through the fore-legs, while a South Slavonian child is drawn through a wolf-skin.[3] The fiction of being born again when elected chieftain is noted by Mr. Morgan (*Ancient Society*), and the fiction would originally have been accompanied by the practice.

"There is in the northern and most remote part of Ulster, namely, at Kenel Cunil, a nation which practises a most barbarous and abominable rite in creating their king. The whole people of that country being gathered in one place, a white mare is led into the midst of them, and he who is to be inaugurated, not as a prince but as a brute, not as a king but as an outlaw, comes before the people on all-fours, confessing himself a beast. The mare being immediately killed and cut in pieces, and boiled, a bath is prepared for him from the broth. Sitting in this, he eats of the flesh which is brought to him, the people standing round and partaking of it also. He is also required to drink of the broth in which he is bathed, not drawing it in any vessel, nor even in his hand, but lapping it with his mouth. These rites being duly accomplished, his royal authority and dominion are ratified."[4]

[1] Ellis's *Brand*, i, 514; cf. Wallis's *Hist. Antiquities of Northumberland*, ii, 28; Hutchinson, ii, 45.

[2] *Proc. Soc. Antiq.*, iv, 266.

[3] *Totemism*, 32, 33. Cf. initiation ceremonies on p. 47.

[4] Giraldus Cambrensis, *Topography of Ireland*, cap. xxv. Campion, in his *Historie of Ireland*, describes the ceremony, but instead of a white mare says a white cow is used. Cf. *Ulster Journ. Arch.*, v, 216-35, where the ceremony is very ably, though not to my mind conclusively, explained as a misinterpreted version of a ceremony which is observed in Carinthia, and which has for its object the humbling of the candidate before he is made king. See also Elton's *Origins of English History*, 176.

This practice has been disputed by many who have not understood its relationship to other customs of the Irish. It is no more barbarous or extraordinary than the totem-clan Coneely with its connection and descent from the Seal; and it is to some extent paralleled by other practices to be met with in various parts of Great Britain.

Even when they began to wear armour, their helmets had horns of metal joined to them, or the shapes of birds and beasts carved upon them.[1] A passage from Tacitus may be quoted to show that images of wild boars were worn as a charm against the dangers of war: "matrem deûm venerantur: insigne superstitionis formas aprorum gestant. Id pro armis omnique tutelâ: securum deae cultorem etiam inter hostes præstat."[2] Beowulf also contains allusion to the practice in the following lines:

> "They seemed a boar's form
> to bear over their cheeks" (i, 604).
>
> "Then commanded he to bring in
> the boar, an ornament to the head,
> the helmet lofty in war" (i, 4299).

and Mr. Kemble tells us that swine among the Germans and the Anglo-Saxons were sacred animals.[3] The boar was, in fact, sacred to Freya, and the bearing or wearing a figure of the animal was considered to propitiate the goddess, and place the wearer under her special protection. Archæological discoveries confirm the testimony of folk-lore. A curious bronze was found in Banffshire, fashioned entirely after the similitude of a boar's head.[4] At Torrs, in Galloway, was found a singular bronze helmet having two long horns turning backwards like those of a goat, and when held on the face it is possible to see through the two round openings or eye-holes.[5] In the British Museum is a bronze head-piece found in the Thames near Waterloo Bridge; from each side of this helmet projects a conical horn. A bronze shield found in the river Witham had the figure of an animal attached to it by rivets.[6] It is curious to compare these with the figures on some bronze plates found in Œland and figured by Mr. Du Chaillu in his *Land of the Midnight Sun* (i, 371). Two of these have for their crests the complete figure of a boar; and of two others, one has his head encased in a

[1] Diodorus, lib. v, cap. 2.
[2] *De mor. Germ.*, lxv.
[3] *Horæ Ferales*, 68.
[4] *Proc. Soc. Antiq. Scot.*, vii, 342, 347.
[5] *Ibid.*, 335, 340; Anderson, *Scotland in Pagan Times*, 113.
[6] Kemble, *Horæ Ferales*, plate xiv.

metal boar's head with eye-holes on either side, while his opponent is crowned with a large pair of cow's horns.[1]

The tabulation of this section repeats the following totems:

(16) Fox. (18) Swine or boar.
(17) Horse. (22) Cow.

and introduces as a new totem:

(34) Deer.[2]

(i) Assumption of the Totem Name.

Many of the names of the early Irish kings are pure totem-names. Thus we have *Con*gall, the white or brilliant hound; *Con*airy Mor, *i.e.*, *Con*-a-righ, the royal hound; *Cu*roi, the hound king; *Con*cobar, the foaming hound; *Cu*culain, the hound of Culain; *Con*aill, the noble hound; *Cu*corb, the chariot hound; *Con*laoch, the hound's whelp, and others of the like class, says Mr. O'Grady, "too numerous to mention".[3] Another name of an Irish king is "Cairbar of the Cat's head".[4] Fynes Moryson the traveller notes in the seventeenth century that Monaghan was inhabited by the MacMahons, that is, he says, the sons of bears.[5] There were tribes known as Griffins by the Shannon, Calves in the country round Belfast, and Wild Red-deer in Ossory, and the evidence is so conclusive as to the two first, that Professor Skene is induced to observe that "it would seem that the tribes took their names from these animals".[6] On some Ogham-inscribed stones found at Drumloghan, county Waterford, Mr. Brash noticed the frequent occurrence of the tribe named "Muc", *i.e.*, the boar, and he traces it in other places, and concludes that it is "evidently the name of a tribe very widely diffused from the extremity of the county of Kerry to that of Waterford, and found also on a monument at Placus, county Cork." Observing that other tribe-names occur by the side of Muc the boar, this is an exact description of the local expansion of a totem tribe.[7]

[1] Mr. Anderson reproduces the letter in his *Scotland in Pagan Times*, 116.

[2] On the deer as a totem, *see* Frazer, *lib. cit.*, 11.

[3] Standish O'Grady's *History of Ireland*, i, 186, 187. *Con* = hound, nom.; *cu* = genitive.

[4] *Dean of Lismore's Book*, by McLaughlan, p. 76.

[5] *Hist. of Ireland*, ii, 364.

[6] Skene, *Celtic Scotland*, i, 206; Elton's *Origins of English Hist.*, 298; O'Curry's *Manners of Anc. Irish*, ii, 208.

[7] *Royal Irish Academy*, x, 113, where a list of the place-names connected with "boar" is given. Of Irish place-names derived from animals, see a curious paper in the same volume, pp. 169-172. The occurrence of the dual form is the particular feature there noted.

It seems a natural conclusion to draw, with the evidence of the clan Coneely before us, that these names must be survivals of totem-names. However the characteristics of animals might lend themselves to name-giving in some cases, they would scarcely develop into a system so extensive as these instances indicate. With reference to the more prevalent name from "con", a hound or dog, Mr. O'Curry states "that the Concheannaich, or Dogheads, were an ancient race who inhabited Magh O'Coinn-chinn, now Moygoniby in Kerry."[1]

In Scotland there were several totem-named clans. The clan Chattan (probably an offshoot of the Catti), who gave their name to the county of Caithness, bore as their chief cognizance the wild mountain cat, and called their chieftain, the Earl of Sutherland, *Mohr an Chat*, the Great Wild Cat.[2] This district is mentioned in the *Irish Nennius* as being conquered by the Cruithnians.—

> "From thence they conquered Alba,
> The noble nurse of faithfulness,
> Without destroying the people or their houses,
> From the region of Cat to Forcu."

One of Cruthne's seven sons was Caith, or Cat.[3] An early Gaelic poem mentions the "Cat" tribe and the "Dog" tribe in the following significant lines:

> "When three battalions were seen,
> Sons to the King of Rualay,
> Cat-headed one battalion was,
> Dog-headed was the one beside it.
> * * * *
> The whole of the Cat-heads were killed,
> The Dog-heads were seized to a man."[4]

In the same district of Caithness also appears the names Hund, or hind, as a chief's name.[5]

In a part of Ross-shire there is a district known by the name of Edderdail, or the territory of the Adders. The early mormaers of the territory of Buchan bore the name of MacDobharcon, or the sons of the Otter. Mr. Skene suggests that the Lugi and Mertæ of Ptolemy, who inhabited modern Sutherland, are the Calves and the Heifers.

The early Welsh poems furnish some examples which have been noted by Mr. Elton. Thus, the tribes who fought at Cattraeth are

[1] *Dean of Lismore's Book*, p. 76, note 2.
[2] Millington's *Heraldry in History, Poetry, and Romance*, p. 103.
[3] *Irish Nennius*, p. 149. [4] *Dean of Lismore's Book.*
[5] *Irish Nennius*, note, p. lxxxiii.

distinguished as wolves, bears, or ravens ; the followers of Cian the Dog, are called the dogs of war, and the chieftain's house is described as the stone or castle of the white dogs.[1]

Many attempts have been made to explain the name of the Isle of Man ; but by far the most scientific is that by Mr. J. M. Jeffcott, who traces it to a totem origin. Mr. Jeffcott first very properly suggests that the name is most probably derived from the tribe of people who first inhabited the island, namely, the Manninee, and he connects this tribe-name philologically with Monapia, Monavia, Mevania, Menavia, Manavia, Menapia, and Menevia, all tribe-names. Among these are to be recognised the Menevii of Britain, the Menapii of Ireland, from whom the Manninee may have migrated, and colonised the island. But whether this be the true tribe-origin of the original Manx population, there is no doubt that the name Manninee denotes the tribe or clan of the kid or fawn. The word Mannan = kid or fawn, exists in the Erse and Britannic dialects and in other tongues.[2]

I now wish to turn to the evidence by which the Teutonic invaders of this country have been shown to possess traces of totem-named stocks. The leaders of the first invaders, Hengist and Horsa, are the stallion and the mare. Many of the places connected with the conquest have, says Mr. Grant Allen, " names compounded with the word, as at Horstead, Horstedkeynes, Horsham, and Horsley. The progress inland of the West Saxons seems to be marked by the white horses cut into the chalk downs of Wantage and Westbury. The final victory of Ecgberht over the West Welsh or Cornish was won at Hengestesdun in Cornwall, now Hengston, that is to say, horse down, whence the surnames Hingeston and Hingston. The sons of the Horse, or the Horsings, though no mentions occurs of them in our documents, have left their mark at two places called Horsington, one in Lincolnshire and the other in Somerset."[3]

Such a record is clearly indicative of a racial custom of some importance, and it is hard to suggest any explanation more conclusive than that of the totem-theory. If we pursue investigation further, other totemistic names are equally forthcoming. The son of Hengist was named Æsc, or the Ash, taking his name doubtless from the tribe of his mother, as in strict totem society. One of

[1] Aneurin's *Gododin*, 9, 21, 30 ; Elton's *Origins of English History*, 299.

[2] *Manx Miscellany*, xxx, 16.

[3] *Cornhill Magazine*, September 1881, p. 333. Cf. Plenderleith's *The White Horses of the West of England.*

Mr. Kemble's charters contains a mention of certain other Æscings besides those of Kent, namely in Surrey,[1] and, says Mr. Grant Allen, the clan has left its name at Ashendon in Bucks.[2] The Surrey Æsc is now the modern town of Ash, and there are towns bearing the name of Ash in Derby, Durham, Shropshire, Somersetshire, and Suffolk. Similarly, the Æscings no doubt left their totem-name to Ashengdon in Essex, Ashington in Northumberland, Somersetshire, and Sussex. The Berings, or sons of the bear, mentioned in another charter, have perhaps stamped their name upon four spots called Berrington in Durham, Gloucester, Shropshire, and Worcestershire. The Buccings, or sons of the Buck, have made themselves a home at Buckingham. The Boccings, or sons of the Beech, still survive at Bocking in Essex and Suffolk. The Birchings (Bercings), or sons of the Birch, left their name to Birchington in Kent. The Wolfings are mentioned in the charters, and their name appears in the personal cognomens of Saxon heroes, though not in place-names. Mr. Lower has advanced a theory that these names were given to the destroyers of wolves[3]; but, as Mr. Ellis has pointed out, this is hardly satisfactory, for "how is it that the killers of the fox, badger, deer, are not equally or more numerous?"[4]

These are some of the best specimens of the totem-named tribes of Anglo-Saxon Britain, besides which Mr. Grant Allen mentions the sons of the Worm at Wormingford in Essex, Wormingshall in Bucks, and Wormington in Gloucester; the Thornings, mentioned in a Kentish charter, and also located at Thornington in Northumberland; the Sunnings, or sons of the Sun, represented at Sonning, Sunninghill, and Sunningwell in Berkshire; the Fearnings in Hampshire, from the Fern, represented by Farningham in Kent; the Earnings and Ernings, named in two of the charters, and meaning sons of the Earn or Eagle; the Beardings, the sons of the Hawk or Buzzard; the Ceanings, of the Pine or Fir; the Heartings of the Hart; and the Hanings, of the Cock.

This practically is Mr. Grant Allen's contribution to this interesting subject, and Mr. Lang seems inclined to accept the evidence.[5] Of course there are some arguments to be advanced against it; and Mr. Isaac Taylor[6] and Mr. Edmund McClure[7] have already stated what these arguments are. But if we believe with the former (as we must do), that such a name as Sandringham gives

[1] *Codex Diplomaticus.* [2] *Cornhill, ut sup.* [3] *English Surnames*, p. 11.
[4] *Antiquities of Heraldry*, p. 108. [5] *Custom and Myth*, p. 265.
[6] *Athenæum*, Feb. 21, 1885. [7] *Ibid.*, March 7th, 1885.

us "the home of the men who lived on the Norfolk sands",[1] and if we remember such instances as the Wilsætas, the men who settled on the Wiley, the names being obtained from the locality, are we therefore to be compelled to carry this theory on, and conclude with Mr. McClure that the Æscingas, Bircingas, Buccingas, Fearningas, Thorningas, Steaningas, denote the men from the Ashes, the Birches, the Beeches, the Ferns, the Thorny District, and the Stony District?

This theory seems to me almost impossible, especially as there is no reason to suppose that these districts were specially devoted to the cultivation of one class of tree, and they do not account for the animal names. But we may give a little consideration to the primitive system of nomenclature. Lewin says that "the Khyoungtha are subdivided into clans, mostly taking their names from the different streams on which they live."[2] The names of the Australian tribes are taken from some local object, or from some peculiarity in the country where they live.[3] In the Panjab "the Sikh clan-divisions derive their names from places and things".[4] In the Montgomery district of the Panjab "the permanent encamping grounds are known by the names of the tribes to whom they have belonged for generations".[5] Here, on the one hand, we have tribes named "from places and things", and on the other, places named from the tribe. How these two systems are reconciled may be seen by turning to evidence which can afford us a glimpse of tribes in motion and in process of carrying on a system of colonisation such as we might suppose went on in England at the time of the Teutonic invasion. In the Thelum district of the Panjab we have such evidence. There "the tribe may be watched breaking up into villages, and the villages disseminating the germs of fresh village colonisation", and here it is that we find the "original villages are always called by some definite name", but the new villages are generally called "after the head cultivator, or are known by the name of a caste."[6]

Now, applying this evidence to that obtainable from England, we may perhaps reach a point from which, at all events, we may

[1] It should, however, be noted that McLennan has shown that sand is a totem among the American Indians, *Fortnightly Review*, xii, 413; and *see* Frazer, *lib. cit.*, 25.

[2] *Wild Races of S.E. India*, 93.

[3] Dawson's *Australian Aborigines*, p. 1.

[4] Tupper, *Punjab Customary Law*, ii, 30.

[5] *Ibid.*, 25.

[6] *Ibid.*, 28, 29.

proceed to ask whether it indicates the advisability of undertaking further research. Mr. Seebohm, rejecting altogether the totem-theory, has forcibly argued that the names to which the peculiar suffix *ing* was added, were personal names, and not family or clan names.[1] But this they must have been if they formed part of totem-named clans, each clan, as we know, containing members of several different stocks. And that personal names formed such a small proportion of the Anglo-Saxon place-name system is in direct accord with what, judging by the Indian evidence, might have been expected. A few great leaders, bearing their old totem-names, separated from their local clans, and probably, but not necessarily, taking with them those of their own stock, founded new settlements, which were named after the leader, or, as we have known him from the Panjab example, the head cultivator.

It may be gathered from this that the few place-names formed from patronymics reveal a system of colonisation which is in accord with archaic custom, and that their peculiar origin from animal or vegetable has alone to do with their totem significance. Thus, the absence of an extensive totem-named list of places does not, as some would think, invalidate the argument with respect to the few that are forthcoming, and we may well go forward and inquire whether the complement to these few totem-names revealed by the names of the early settlements are not to be found in the Anglo-Saxon personal name-system. Unfortunately, there is not much evidence for this branch of inquiry, but the little there is tends towards the same results.

Already we have noted the personal names connected with wolf, such as as Beowulf, Ethelwulf, etc. Mr. Kemble, in his paper on "Anglo-Saxon Nicknames" in the Winchester volume of the Archæological Institute (1845), mentions such cases as "Enede, or the duck",[2] "Crâwe, the crow",[3] and Buca, an earl,[4] "who probably owed his name to some fancied resemblance, personal or moral, to the animal whose name he bears." In the Anglo-Saxon *Chronicle* we find the names Westerfalcon, Seafowl. Arthgal was "the first Earl of Warwick and knight of the round table", and Arth or Narth signifies a bear.[5]

Placed as these are alongside of the earliest leaders or kings, Hengist and Horsa, we have it before us that the Anglo-Saxons had totem-named stocks. Here, however, our evidence ceases. There

[1] *English Village Community*, 362.
[2] *Flor. Wig. a.*, 96
[3] *Cod. Dip.*, No. 685.
[4] *Ibid.*, No. 75.
[5] Ellis's *Antiquities of Heraldry*, 113.

is no evidence of totem-beliefs, so far as we can actually identify the early beliefs of the Teutonic race; and it would seem as if the tribes had passed beyond the totem stage of social development, retaining just the old system of naming from animal and plant names, and leaving all else of totemism as one of the things of their past.

The tabulation of the totems in this section shows that the following are again introduced:

(2) Wolf.
(3) Fowl.
(4) Cat.
(15) Dog.
(17) Horse.
(20) Trees.
(22) Cow.
(23) Raven.
(27) Otter.
(28) Crow.
(34) Deer.

and introduces the following new totems:

(35) Bear. (36) Griffins. (37) Adder.

(*j*) *Assumption of the Totem-mark.*

We now pass on to our final subject of inquiry, namely, whether in village customs there is anything equivalent to totem-clan customs.

This may be best accomplished by first examining the organisation of a totem-formed settlement. "In the large villages in which the red man dwelt in olden times, those who bore the same totem had their distinct quarter, and set up their device on one of the posts of their gates. Those who bore the same totem are, or at all events are supposed to be, blood relations. On this ground they are forbidden to intermarry. If a stranger presents himself at a distant lodge, his bearing the same totem as its occupier entitles him to a hearty welcome. If a man is killed, everyone who bears his totem is bound to avenge his death. Sometimes the totem carries with it hereditary privileges, such as that of furnishing the tribe with its chief, or that of performing certain religious ceremonies or magic rites. The totem serves for a surname."[1]

The special feature which I am anxious to emphasise in this example of a totem village is that "those who bore the same totem had their distinct quarters in the village, *and set up their device on one of the posts of their gates.*" In the *Academy* of 27th September 1884, some details of this practice are given as follows:—"At

[1] Abrahall's *Western Woods and Waters*, pp. 311-312.

the principal entrance into this enclosure there was the figure of an animal, or some other sign, set up on the top of one of the posts. By means of this sign everybody might know to what particular family the inhabitants of that quarter claimed to belong. For instance, those whose *ododam* was the bear would set up the figure of that animal at their principal gate. Some of the families were called after their *ododam*. For example, those who had the gull for their *ododam* were called the Gull family, or simply the Gulls; they would, of course, put up the figure of the bird at their gate. Others did not adopt this custom; for instance, the family who set up the bear were called the Big Feet. Many of the village gates must have been adorned with very curious carvings, in consequence of parts only of different animals being frequently joined together to make up the ensigns armorial of a family; for instance, the *ododam* of one particular section consisted of the wing of a small hawk and the fins of a sturgeon."

The examination of the land-customs of Britain has revealed the existence of one very prevalent system, namely, the periodical allotment to a body of customary tenants of holdings in a common field. At the time of the allotment each tenant used a particular mark, usually cut into a twig, apple, or other similar object; and the lands which fell to his share were stamped with his mark. The late survival of the common-field system has preserved these marks from destruction, and an examination of them leads us, by clearly marked stages, to the far-off period when they represented the signs of original clan-households, and those signs have every resemblance to totems.

On the sculptured stones of Scotland are figured numerous emblematical marks, which can only be explained by their identification with the tribe-marks of those who erected the stones, whether for definitions of boundaries or for memorials of the dead. The most remarkable of the emblems are the double disc, double disc and sceptre, crescent, crescent and sceptre, altar, altar and sceptre, and hawk, serpent, serpent and sceptre, elephant, horse, bull, boar, bird of prey, human figure with dog's head, fish, dog's head, horseshoe, arch, mirror, mirror-case, comb, comb-case, hippocampus, centaur, capricornus, undefined monsters, human figures, the tree, the camel.[1] It is recorded in the Scottish chronicles that King Reatha, who is supposed to have lived 200 B.C., "commandit als monie hie stanis to be set about the sepulture of

[1] Forbes Leslie's *Early Races of Scotland*, ii, 359, 365, 377.

everie nobillman as was slane be him of Britonis; on their sepulturis was ingravin imageris of dragonis, wolfes, and other bestis for no invention of letteris was in thay days to put their deides of nobilmen in memore."[1]

That the land-marks of the modern English villagers may be identified with the ancient homestead or clan-marks receives illustration from the strongly surviving Scandinavian custom. Mr. Du Chaillu, in his *Land of the Midnight Sun*, says: "Each farmer seemed to have a mark of his own; the agricultural implements and other articles being stamped differently. This old custom is called Bo-märken, and each family has inherited its distinguishing mark from its ancestors. Each parish has its own Bo-märke."[2]

Everyone has his own mark branded on the ears of all his reindeer, and no other person has a right to have the same, as this is lawful proof of ownership. According to custom, no one can make a new mark, but must buy that of an extinct herd; if these are scarce, the price paid to the families that own them is often high; the name of the purchaser and each mark have to be recorded in court like those of any other owner and property.[3]

This system of house-marks prevails in North Germany, and Professor Michelsen, in his treatise *Die Hausemarke*, traces them to a prehistoric period. Mr. Williams thus summarises the evidence in a valuable paper in *Archæologia*.[4] In Southern Ditmarsh a stone slab of the sepulchral chamber in one of the hunengrābe or gigantic tumuli of the stone period has been found, rudely engraved with a mark of a type which is still popular. Weapons of stone and metal are also thus found marked. Marks have been found on Urgräber in the south of Sweden and the north of Europe. They were in common use in Norway, Sweden, Iceland, and Denmark in the 12th and 13th centuries, and the Icelandic Gragas in particular contain numerous minute regulations as to the adoption and the use of marks for sheep, house-cattle, eider-ducks, harpoons, etc. They are also mentioned in the Old Norse and Swedish Rights. In Iceland marks were not to be taken arbitrarily, but the owner's intention was to be announced before five neighbours, and also at the spring *Thing*. In Ditmarsh and Denmark the owner's mark was cut in stone over the principal door of the house; it designated not only his land and cattle, but his stall in the church, and his grave when he was no more. In Holstein

[1] [*Chronicles of Scotland*, 2nd Buke, cap. x.]
[2] *See* vol. i, p. 314.
[3] *See* vol. ii, p. 168.
[4] Vol. xxvii, 383, 384.

the beams of the cottages of the bondservants were incised with the marks of their masters. A pastor writing from Angeln says: "The hides had their marks, which served instead of the names of their owners." In the island of Föhr, the mark cut on a wooden ticket is always sold with the house, and it is cut in stone over the door; and the same custom is still in use in Schleswig and Holstein.

From these important facts it may be concluded that the ancient house-mark included the land-mark, cattle-mark, implement-mark, and grave-mark appertaining to each house, and that house, land, cattle, and grave, thus linked together under a common mark, were the descendants of the once undivided possessions of the clan.

The points in the history of house-marks which have been noted are but the initial features of an extensive and very interesting inquiry which penetrates into studies which have a whole literature devoted to them. Thus, Michelsen considers armorial bearings to have been originally little more than decorated marks, and he asserts that the arms, for instance, of Pope Hadrian VI, a Netherlander, were formed from house-marks; and some knightly families in Schleswig still retain their house-marks as coats of arms. It should also be remembered, says Mr. Williams,[1] that there was often a supposed connection between the figurative name of a house and its owner's mark, which was a representation of the object more or less exact. Michelsen considers that the names and signs of inns are but remnants of the once universal and necessary custom of giving figurative names to houses. Tradesmen's signs are thus but a pictorial substitute for the house-mark, and Pauli considers that the names of citizens, *if names of animals*, originated in the names of their houses.[2]

This extremely suggestive remark, made, be it observed, quite unconscious of its bearing upon researches into totemism, is confirmed quite unexpectedly by a writer upon Scottish surnames. In the Scottish burghs, it is said, "men distinguish themselves and their dwellings by signs or cognizances. It is not only inns and shops, or booths, that exhibit these emblems; burghers and gentry of all classes do the same and probably it is to this custom that we owe a large class of names that are not otherwise to be accounted for—the family names derived from names of animals. Even if we suppose that some accidental relation to the animals suggested the names of Hare and Dog, Brock, our Scottish name

[1] *Archæologia*, xxxvii, 385.

[2] *Ibid.*, 386.

of badger, and the well-known names of Swan, Eagle, Heron, Peacock, and Crow, we cannot adopt such an origin for the surname of Oliphant (the Scotch shape of elephant), or of Lion, the name of the noble family of Strathmore, whose family tradition does not point to any foreign source, but who can hardly allege an encounter with the royal beast in the forest of Angus. They bore for their coat-armour the Lion of Scotland, and may perhaps have exhibited a lion over their gate, as we know they constructed in the shape of a lion that curious silver cup still preserved at Glammis, and which is the prototype of the 'blessed bear of Bradwardine'."[1]

In England the custom of redistributing the lands of a village by lot has preserved to us the actual figures used in these rustic ceremonies. I have collected and compared those in use at Aston in Oxfordshire, Southease in Sussex, Congresbury in Somersetshire, and Marden in Herefordshire, and the likeness that obtains among the marks used by these widely distant villagers seem to point to an ancient origin, while their names include the following animal names: the crane, the hare, the duck, the ox, the mare, the horn. This subject is, however, very obscure, because of the impossibility of comparing actual savage totem-marks. Mr. Lang points out that "totems are, as a rule, objects which may be easily drawn or tattooed, and still more easily indicated in gesture language." Thus, "the Crow tribe is indicated in sign-language by the hands held out on each side, striking the air in the manner of flying. . . . In mentioning the Snakes, the hand imitates the crawling motion of the serpent, and the fingers pointed behind the ear denote the Wolves."[2] Mr. Lang obtains his evidence from some remarkable papers on "Sign-language among North American Indians", published in the first volume of the *Bureau of Ethnology of the Smithsonian Institute.* In this volume only one pictograph is given of the signs used for animals. Thus, bear, being the animal that scratches with long claws, is designated by a figure very roughly representing the open hand. Now, if the connection between this pictograph and its original meaning of bear had been lost, as it would have been if the totem-system had died out before the sign had been recorded, there is absolutely nothing to enable us to identify its earliest meaning as a totem-sign.

That the English village-marks are not the mere invention of

[1] *Concerning some Scotch Surnames*, Edin., 1860, pp. 31-33.
[2] *Custom and Myth*, p. 262.

the unlearned peasantry is, I think, shown by the characteristics common to all of the sets. That they are very ancient may be shown by comparing them with the Runic signs found on the early stone monuments.[1] That they are represented in well-known heraldic signs may be shown by comparing them with some of the early devices pictured by Mr. Ellis in his book on the *Antiquities of Heraldry*, wherein he produces overwhelming evidence to prove that heraldic devices of modern Europe are derived from the tribal marks of prehistoric times.

Of course, if the tribal totem-marks were represented on the houses and on the cattle of the tribesmen as we have shown above, they would be assumed by the chiefs and members of the tribe.[2] When Colonel Campbell was among the wild Khonds of India, he found out that the chieftains lay claim to a fabulous descent, in support of which they pointed "to their coat of arms, as indicating the animal or object from which their ancestor sprung. The Rajah of Goomsur, for example, had a peacock, another prince a snake, and a third a bamboo-tree; and these cognizances are no small sources of pride".[3] It does not seem to me that this recorded belief of the wild and savage Khonds differs from some of the recorded beliefs of British heraldry. Thus, a tradition among the O'Kellys of Hy-many states that they have borne as their crest an enfield since the times of Tadhg Mor:

> ["In the battle of Brian, Tadhg fell
> As a wolf-dog fighting the Danes"]—

from a belief that this fabulous animal issued from the sea at the battle of Clontarf (A.D. 1014) to protect the body of the O'Kelly from the Danes, till rescued by his followers.[4] The tribe of the Ui Duinn, of which St. Brigit was a kinswoman, wore for their crest the figure of a lizard, which appeared at the foot of the oak-tree

[1] Dr. Hanus communicated to Mr. Williams his opinion that "the connection of our marks with Runes is unquestionable."—*Archæologia*, xxxvii, p. 388. Some curious rock inscriptions in Brazil are figured in *Journ. Anthrop. Inst.*, iii, 114; and General Pitt-Rivers considers them to be drawings of men and *animals*, the arms and legs of which were shown by straight lines. Similar marks are to be met with on the south of Spain, and they are also to be found on stones in the British Isles. I will merely observe here that they are not unlike some of the village-marks to which I have drawn attention.

[2] Sullivan, in his *Introd. to O'Curry's Lectures*, i, p. cccclxx, states that "the shields of the ancient Irish seem to have been ornamented with devices which seem to have been peculiar, if not to each Tuath, at least to each chief."

[3] Campbell's *Wild Tribes of Khondistan*, 26.

[4] *Tribes and Customs of the Hy-Many* (Irish Arch. Soc.), p. 99.

above her shrine.[1] The family of the Corvini are said to have hereditarily borne a raven as their crest, in consequence of an early ancestor of that race having been assisted in combat by a bird of this species,[2] and the raven as an old Anglo-Saxon emblem is well known.[3] The founder of the ancient Lincolnshire family of the Tyrwhitts having fallen wounded during a skirmish, would have perished but for the cries of the lapwing, which brought his followers to the spot, and in memory of the deliverance he assumed three pee-wits as his device.[4] The Cresacre family have for their crest "the wild cat", and an old legend connects the founder of their family with the death of a cat at the church door,[5] typical, it may be suggested, of the success of the Church over the older totem-faith. To these examples we may perhaps add the custom of the Highland clans who wore a badge on the side of the bonnet, which ascertained the tribe of the individual. The Grants have the fir or pine, the Macleods, the juniper, the Frazers, the yew, the Macintoshes the box, the Mackenzies the holly, the Macdonalds the heath.[6]

In this section we find repeated the following totem names:

(2) Wolf.
(5) Hare.
(15) Dog.
(17) Horse.
(18) Swine.
(19) Fish.
(20) Trees.
(22) Cow.
(23) Raven.
(26) Dragon.
(28) Crow.
(29) Peacock.

(h) Local Cults connected with the Worship of Totems.

It remains for us to show how totemism was affected by the introduction of a higher order of religion, namely Christianity, in the cases we have had before us. Of course the lower cult would have to give way to the higher. Mr. Lang has given us an example of this from the worship of Apollo in Greece. He notes from Suidas that the Telmissians in Lycia claimed descent from

[1] *Revue Celtique*, iv, 193; Elton, *Origins of English History*, 298.

[2] Lower's *Curiosities of Heraldry*, 13.

[3] Cf. the capture of the magic raven banner by the West Saxons, *Anglo-Saxon Chronicle*, 878, and Asser's *Life of Alfred.*

[4] Swainson's *Folk-lore of Birds*, 186. This is identical with the totem-legend of the islands Leti, Moa, and Lakor, the inhabitants of which reverence a shark, and refuse to eat its flesh because a shark once helped one of their ancestors at sea. Frazer, *lib. cit.*, 7.

[5] Gomme's *Gent. Mag. Lib., Traditions*, 116.

[6] Grant's *Superstitions of the Highlanders*, ii, 207.

Telmissus, who was the child of an amour in which Apollo assumed the form of a dog. "Probably", says Mr. Lang, "the Lycians of Telmissus originally derived their pedigree from a dog, and later made out that the dog was Apollo metamorphosed".[1] But Mr. Lang's "probably", as applicable to the Greek example, becomes almost a certainty when we turn to the parallel state of things to be found in India. Mr. Risly, in describing the totem organisation of some of the aboriginal tribes, says of the Khattya Kumhárs that "they appear to be conscious that the names of their sections are open to misconception, and explain that they are really the names of certain saints, who, being present at Daksha's horse sacrifice, transformed themselves into animals to escape the wrath of Siva, whom Daksha had neglected to invite".[2]

The parallel to this state of things in English folk-lore is fully represented in the legendary accounts of our early saints, by which they are so intimately connected with animals. If we analyse these legends, we find they fall into three groups, each group being most significantly parallel to phases of animal-belief which are represented in folk-tales. Thus we have as group (1) the legends where animals assist the saints in times of emergency; (2) the legends where the saints are recorded to have turned into animals; (3) the legends where the saints are worshipped in the form of animals. I need not give specimens of each of these groups of saint-legends, because they are fairly well known, and because the elaboration of them would require a considerable amount of space. But of the third group very little note has been taken, mainly because the facts belonging to it are not to be found in the ordinary sources of saintly biography, but are still scattered among the traditional beliefs of the people.

Now, we have already noted the remarkable evidence of the Chaddagh fishermen, whose attitude towards the fox as a totem seems so unmistakable. But there is no idea of their worshipping the fox until we come to enquire into the biography of their local saint named MacDara. This saint is the patron saint of the fishermen, who, when passing MacDara's island, always dip their sails thrice, to avoid being shipwrecked. But then, in the folk-belief, we have this remarkable fact, that MacDara's real name was Sinach, a fox[3]—an instance, it would seem, of a totem-cult being transferred to a Christian saint. Another example is even more remarkable. Near the church of Kirk-

[1] *Myth, Ritual, and Religion*, ii, 205. [2] *Asiatic Quarterly Review*, ii, 80.
[3] *Folk-lore Journal*, ii, 259.

michael, in Banffshire, there is a fountain, once highly celebrated, and dedicated to Saint Michael. But the real guardian of the well assumed the semblance of a fly, who was always present, and whose every movement was regarded by the votaries at the shrine with silent awe, and, as he appeared cheerful or dejected, the anxious votaries drew their presages. This guardian fly of the well of St. Michael was believed to be exempt from the laws of mortality. To the eye of ignorance, says the local account, he might sometimes appear dead, but it was only a transmigration into a similar form, which made little alteration to the real identity.[1] It seems impossible to mistake this example as evidence of a local cult where the fly was worshipped ; besides which, we have a repetition of the distinct totem-belief, where totemism has grown into a religious cult, that no change takes place in the totem-object—a belief already recorded of the "holy fish" of Kilmore, and found to be extant in India. Other beliefs connected with early saints are not so clear as this. Mystical doves appear frequently in the biography of the Christian saints, but in such a way as to suggest the older cult of the bird having been superseded by the new religion. A snow-white dove with a golden bill was wont to sit on the head of St. Kentigern while occupied in sacred rites among the Picts of Galloway ; and it is related that a certain damsel, severely distempered, having been carried to the shrine of St. Ebba at Coldingham, recovered after beholding a white dove on the altar in a vision.[2]

At the well of St. Thecla, at Llandegla in Denbighshire, people afflicted with epilepsy walked three times round the well, after sunset, and if a male, offered a cock, and if a female, a hen. This fowl was carried in a basket, first round the well, and then into the churchyard, where the ceremony was repeated. The patient then went into the church and rested there till daybreak, and then, leaving the fowl in the church, he departed. If the fowl died, the disorder was supposed to be transferred to it and the cure to be effected.[3] The sacred bird, the cock, is here very significant, and at Rhystud the festival day of St. Cynddilig is kept from mid-day to midnight, on the first of November, and during this period the offering of a cock is permitted, as a cure for whooping-cough.[4]

[1] Sinclair's *Statistical Account of Scotland*, xii, 465. On flies as totem-gods among the Greeks, consult Lang's *Myth, Ritual, and Religion*, ii, 201.

[2] Dalyell's *Darker Superstitions*, 418, quoting the *Lives of the Saints;* cf. Baring Gould.

[3] Roberts' *Cambrian Antiquities*, 243.

[4] *Ibid.*, 244.

Important archæological testimony aids the testimony of folk-lore in this section of the subject. In 1877, the skeletons of three horses' heads were discovered in the belfry of Elsdon Church, Northumberland. In the spire immediately over the bell was found a small chamber without any opening, and in it, nearly filling the cavity, were three horses' heads, or rather skulls, piled one against the other in a triangular form, the jaws being uppermost. The chamber was evidently formed to receive them, and the spot chosen for the fixing was the highest part of the church.[1] If we compare this with the well-known passage of Tacitus, describing the sacred groves of the Germans, and stating that the heads of animals hung on the boughs of trees, or, as it is noted in another passage, "immolati diis equi abscissum caput", it seems to me that we cannot resist the self-evident conclusion that the Christian church of Elsdon adopted the custom of the pagan grove in Germany.[2]

Davies, in his wanderings into the history of Druidism, has succeeded in establishing one or two points of importance, one of which is that the sanctuary of one of the great druidic Gods was presided over by the deity in the shape of a bull, the officiating priests being known by the name of the deity[3]; of another, that it was presided over by a sow, the devotees of which bore the title of little pig, the congregation, that of swine, the chief priest, boar[4]; and it is at all events a suggestive parallel that many of the Irish local saints are believed to guard the lives of certain animals; thus, Mr. Elton notes from Giraldus that St. Colman's teal could neither be killed nor injured; St. Brendan provided an asylum for stags, wild boars, and hares; and St. Beanus protected the cranes and hazel hens, which built their nests upon the Ulster mountains.[5] It is also curious that in connection with well-worship, which has been connected with totem-cults by various parallels, the votaries in Ireland crawled around them several times on their hands and knees,[6] the symbolism, at all events, of animal life, and parallel to what it is conceivable to have been the practice among the Druidic priests, who identified themselves with the names and cults of the bull and the boar.

[1] *Berwickshire Naturalists' Club*, ix, 510.

[2] The hanging of animals' skulls—the bear—upon trees outside the houses is a custom of the Ainos, *Journ. Anthrop. Inst.*, iii, 239, and the bear was a totem-god among these people, *ibid.*, 124, and *Folk-lore Journal*, vi, 11.

[3] Davies's *Mythology of the Druids*, 136, 138.

[4] *Ibid.*, 414.

[5] Elton's *Origins of English History*, 298.

[6] Roberts' *Cambrian Popular Antiquities*, 236, 238

The succession from totem-worship to saint-worship, which in the above cases seems marked very strongly, is also reflected by less well-marked instances. Remembering the close relationships between the totem and the individual totemist, remembering the assistance which totems are called upon to give to the tribe when engaged in hostilities against other tribes, it seems that we may connect with this stage of totem-belief the following Welsh custom. When any person supposes himself highly injured, it is not uncommon for him to repair to some church dedicated to a celebrated saint, as Llan Flian in Anglesea, and Clynog in Carnarvonshire, and there, as it is termed, offer his enemy. He kneels down on his bare knees in the church, and, offering a piece of money to the saint, utters the most virulent imprecations, calling down curses and misfortunes upon the offender and his family for generations to come.[1] A still more significant variant of this singular practice is recorded as appertaining to the well of St. Ælian, not far from Bettws Abergeley in Denbighshire. Near the well resided a woman who officiated as priestess. To her the person who wished to inflict a curse upon an enemy resorted, and for a trifling sum she registered in a book kept for the purpose the name of the person on whom it was wished it should fall. A pin was then dropped into the well in the name of the victim, and the curse was complete.[2] The whole of this ceremony is both anti-Christian and totemistic. In the first place, the symbolism of the name of the victim doing duty for the victim himself is an echo of a far-reaching savage idea.[3] Saints are not specially friendly to one family, totems are ; saints do not help their worshippers in vengeance, totems do ; saints do not carry on the blood-feud to future generations of one family, totems do ; and above all, totemism favours the notion of women being priests, and not men.[4]

The tabulation of totem-names appearing in the survival of totem-practices under other cults repeat the following totems :

(2) Wolf.
(3) Fowl.
(4) Hare.
(16) Fox.
(17) Horse.
(18) Swine.

[1] Hampson's *Medii Ævi Kal.*, i, 170; Forbes Leslie, *Early Races of Scotland*, i, 95.

[2] Roberts' *Cambrian Popular Antiquities*, 246.

[3] Cf. Mr. Clodd's admirable article on this subject in *Folk-lore Journal*, vii, 135-161.

[4] On the house father as priest among the Aryans, see Hearn's *Aryan Household*, 85 ; on the oldest woman as priestess at rites strongly indicative of totem-origin among the Karens, see *Journ. As. Soc. Bengal*, xxxiv (2), 206.

(32) Dove,

and I think we may include the Banffshire well-fly[1] under the same category as

(7) Butterfly.

One very important matter remains to be considered in connection with this subject, namely, which among the races of Britain must be credited with the introduction of totemism. Clearly it must have been a race who not only were totemistic, but who had not advanced far towards a higher civilisation. Now the totemism of the Teutonic invaders, if it be taken as proved, does not penetrate much beyond their name-system, and was abandoned very soon—that is, within two hundred years—for a social system which was then well on its way to the threshold of civilisation, and it does not seem to me to be reasonable to attribute the survivals of totemism in folk-lore to the Teutons. Of the Celts we know much less, and of the ethnological condition of Britain during the so-called Celtic period we know next to nothing. But the Celtic period insensibly shades off into the period of the dolmen builders, the stone-circle builders, the hut-dwellers and the hill-men. Nowhere can we draw the line of demarcation, and in the meantime modern research is gradually showing us that such a line is needed in order to account for the phenomena it is called upon to deal with. Thus, almost within the domain of the present subject, we find that Professor Rhys draws a line of distinction between the greater divinities of the Celtic pantheon, who lent themselves to the localisation, and the crowd of minor divinities, who were never anything else but *genii locorum*. Among the latter he includes "the spirits of particular forests, mountain tops, rocks, lakes, rivers, river-sources, and all springs of water which have in later times been treated as holy-wells."[2] He then goes on to say that "it has been supposed, and not without reason, that these landscape divinities re-acted powerfully on the popular imagination, in which they had their existence, by imparting to the physical surroundings of the Celt the charm of a weird and unformulated poetry. But what race was it that gave the Celtic landscape of antiquity its population of spirits? The Celtic invaders of Aryan stock brought their gods with them to the lands they conquered; but as to the innumerable divinities attached, so to say, to the soil, the great majority of them were very possibly the creations of the peoples here before the Celts."[3]

[1] Another insect-tribe, the ants, existed in the north of Cashmere. McLennan, *Fortnightly Review*, xii, 419.

[2] *Celtic Heathendom*, 105. [3] *Ibid.*

In pursuing the investigation of this possibility the student at once sees cleared away from his path a difficulty which has been recognised, but not adequately met. "If the remains of fetichism", says Mr. Keary, "could be so vital, fetichism itself must have had a lengthened sway; but the people could never have become the Aryan *nation* had their notions of unity been confined to the local fetich and the village commune."[1] Let us once clearly understand that the local fetichism to be found in Aryan countries simply represents the undying faiths of the older race which the Aryans incorporated into their own high beliefs, and the difficulties lying in the way of accounting for Aryan progress seem to vanish.[2] What we have to note, therefore, is that the requirements of Aryan history need the identification of the local fetich-creeds as non-Aryan in origin; and that the requirements of a scientific examination of any branch of these creeds need the explanation of the means by which they have survived—first as a local cult, finally as the superstitions included within the domain of folk-lore.

Now it is significant, in view of these researches into the survivals of totemism, that when we come to consider the way in which the Aryan may be shown to have assimilated the non-Aryan beliefs with which he came into contact, the best illustration is obtained from one of the most prevalent phases of witchcraft, namely, that in which the witch is supposed to have the power of transforming herself into animals. In India, one of the totem-tribes of the aborigines is that of the Moondahs. The Aryan tribes settled in Chota Nagpore and Singbhoom firmly believe that these Moondahs have powers as wizards and witches, and can transform themselves into tigers and other beasts of prey, with the view of devouring their enemies, and that they can witch away the lives of man and beast.[3] A very slight acquaintance with the painful records of witchcraft in this country reveals these selfsame beliefs, prevalent among the Aryans of India towards their non-Aryan neighbours, as entertained by the peasantry of this country towards witches.[4] Can we not interpret them, there-

[1] *Outlines of Primitive Belief*, 110.

[2] Mr. Lang notes the difficulty in his researches into Greek myth, and confesses that "it almost escapes our inquiry". If consideration be given to the survival of savage beliefs among the aboriginal population of Greece, does not this answer the questions Mr. Lang puts about Artemis and the bear-cult? Cf. *Myth, Ritual, and Religion*, ii, 215.

[3] Dalton, *Kols of Chota Nagpore* in *Journ. Asiatic Soc. Bengal*, 1886, part ii, p. 158.

[4] *E.g.*, Dalyell's *Darker Superstitions*, 560.

fore, as the survival of an old antagonism between Aryan and non-Aryans, and particularly with reference to totem-beliefs? These Moondahs, who could turn themselves into tigers and other beasts of prey, actually called themselves tigers and other beasts of prey, worshipped them, believed they were descended from them, according to all the doctrines of totem-beliefs. The attitude of their neighbours towards them may well be explained, therefore, as a result of contact with totem-tribes. But then the selfsame attitude of the mediæval English or Scottish peasant may logically, taking into consideration all the evidence for the survival of totemism, be interpreted in the same manner. Witches are supposed to have been able to turn themselves into hares, foxes, and cats, and we must remember these are the last remnants of the wild animals of Britain, and therefore take the place of the whole tribe of the animal world who were formerly called upon to do duty in the totem-system of belief, a substitution which is proved by one example at all events, namely, the legend recorded by Giraldus, wherein witches turned themselves into wolves. The origin and history of witchcraft in Europe has yet to be written, but when it is undertaken, the phenomenon which the study of totem-survivals presents must be carefully considered. In the meantime, it appears to me that a clue to the earliest record of the subject may be found in the well-known description of the Druid priestesses on the island of Sena by Pomponius Mela.[1] These were capable of performing almost all the powers which in later years belonged to witches, including the raising of storms by incantation, and of transforming themselves into whatever animals they pleased. Remembering that on the great authority of Professor Rhys we may classify Druidic rites as belonging to the non-Aryan races of Britain,[2] there seems convincing proof that, as in India, the Aryan invaders were made gradually to believe that the people whom they conquered and enslaved could turn themselves into the animals whose names they bore. .

We have now examined a not inconsiderable section of folk-belief, and, grouping the items according to the formula supplied from savage practices, we have seen that they assume the position of relics of a long-lost system of social organisation. Like all attempts to reset the survivals of prehistoric life within their own

[1] Lib. iii, cap. 6. This island is not to be identified by its name, but it is at least curious to note that the north suburb of Douglas, in the Isle of Man, was formerly called Sena.—Harrison's *Records of the Tynwald*, 14.

[2] Cf. Fergusson, *Tree and Serpent Worship*, 29.

framework, we have not succeeded in producing an exact picture—it is but a mosaic. Still I venture to think that the conclusion is irresistible, that folk-lore has preserved, by means of its traditional sanction, unquestioned evidence of totemism in British custom. Setting aside any one or more items which may be due to the accidents of folk-lore; allowing that the original totem-objects may not now be represented by some of the objects with which folk-lore endows totem-beliefs; admitting that the negative evidence of folk-belief is not complete, and probably may never now be made complete; we have remaining to us a proposition of remarkable clearness and precision, founded upon the evidence of folk-lore, supplemented here and there by the evidence of archæology and language. This evidence includes three very significant type-forms of totem survival in folk-lore, namely, the Clan Coneely, the Ossory Wolf, and the Chaddagh fishermen, and a large group of folk-belief, which is at present best explained if we consider its items in the light of fragmentary relics of once complete forms of totemism. That this large group of folk-belief which we have dealt with needs explanation at the hands of the student of history to account for its existence alongside all the facts of civilisation, seems to me to be one of the elementary features of the science of folk-lore. It cannot be suggested that every item of it is due to the existence of superstitious tendencies, uninfluenced by traditional adherence to old forms of superstition; for, granting that the mere existence of superstition is no proof of archaic origin, it must be admitted at the same time that those who have handed down for the observation of folk-lorists the various items of superstitions which I have now examined, are the peasant class of the outlying parts of our land, who would either base their modern superstition upon traditional lines, or colour it with traditional fancies, but who would even more likely carry on from generation to generation the old forms of superstition sanctified by the belief and practice of their forefathers.[1] And when we come to classify and compare these traditional superstitions, we find that they readily, without any forcing or straining of the forms in which they are now represented, fit in with the classification which belongs to savage totemism. No doubt

[1] Thus Mr. Roberts notices an answer to a query as to the origin of well-superstitions, "that their ancestors always did it", *Cambrian Popular Antiquities*, 238; and Spenser, in recording his curious notes of Irish customs, takes care to preface them by the observation that "it is the maner of many nations to be very superstitious and diligent observers of old customes and antiquities, which they receive by continuous tradition from their parents," *View of the State of Ireland*, 100.

they have during the centuries of their existence as folk-lore undergone some process of change; it is certain that there are animal and plant superstitions which cannot readily be fitted into a totemistic framework; but the changes which folk-lore undergoes will account for some of the superstitions which we have not been able to take count of, and it has not been my object, on the present occasion, to bring forward any evidence but that which seemed to belong to totemism in the form in which each superstition or custom now exists. Further research will doubtless consider all these points, and will settle the relationship of the animal and plant superstitions which have not yet found a place in the totem-system to those which have found such a place. This relationship will, I am persuaded, be shown to be one of change from older types. Transitional forms in folk-lore, like all evidence which belongs to the study of survivals, assume shapes which it is sometimes hard to trace to an original. In the meantime it appears to me that, both by the methods adopted and by the results arrived at, it may be put forward as a sound working hypothesis that in the survivals of folk-lore lay hid the evidence of a once-existing system of totemism in Britain—an hypothesis which at all events will serve the purpose of directing future research, just as Mr. McLennan twenty years ago, in putting forward his hypothesis on totemism among the ancient nations, stated his well-founded belief that the only way to deal with the ancient mythologies "is to make them the subject of an hypothesis".[1]

[1] *Fortnightly Review*, xii, 408.

G. L. Gomme.

THE ETRUSCAN NUMERALS.

I.

IN offering the following remarks on the Etruscan Numerals, and therefore on that most obscure of linguistic problems—the Etruscan language, I have no intention of giving any lengthy historical account of the melancholy career, not progress, of Etruscology during the last 150 years. The votaries of the problem have compared Etruscan with Ethiopic, Egyptian, Coptic, Arabic, Hebrew, Chinese, Basque, Sanskrit, Greek, Latin, Keltic, Teutonic, Rhaetian, etc.; but without any real success. Each theory has convinced scarcely anyone except its inventor, and the riddle has remained unsolved. In the abstract, it seemed probable that Etruscan was an uncouth and outlying member of the Indo-European Family. Hence the prolonged efforts of Lanzi and the Italian school, which culminated in the thirty years' research and huge failure of Corssen.[1] These efforts, although now on the decline, are still being continued by several savants, foremost amongst whom stands Dr. Deecke, who, to the surprise of Etruscologists, "suddenly turned round upon his own demolition of Corssen's doctrine, and avowed himself a convert to the belief that Etruscan was, after all, an Indo-European language."[2] Deecke's labours in the field of Etruscology have been so great, and are, notwithstanding his present opinions, so valuable, that his name will ever be entitled to the deepest respect of the workers in this difficult investigation. Another notable Aryanist is Prof. Bugge of Christiania, who, in his pamphlet *Der Ursprung der Etrusker durch zwei lemnische Inschriften erläutert*, 1886, has given a remarkable rendering, on Aryanistic principles, of the recently-discovered Etruscan Inscriptions of Lemnos; although the Professor, as Dr. Carl Pauli convincingly shows, has adopted a wrong order of the words, yet, nevertheless, he appears to find no difficulty in translating the Inscriptions, a circumstance which speaks for itself.[3] A third is Prof. Moratti,[4] of whose efforts a critic remarks: "Part of

[1] *Die Sprache der Etrusker*, 1874.
[2] Prof. Sayce, in *The Academy*, Jan. 9, 1886.
[3] *Vide* Sayce, "The Etruscans in Lemnos", in *The Academy*, July 24, 1886.
[4] *Studii sulla antiche Lingue italiche*, 1887.

the work consists of translations (?) of the Etruscan . . . inscriptions, in which almost every word is interpreted without even the addition of a note of interrogation. Our confidence in these translations is shaken, however, by finding equally fluent renderings of Mordtmann's copies of the Phrygian execratory formula, which Prof. Ramsay has shown to be a mass of blunders. In fact, we may say that if Prof. Moratti has succeeded in proving anything, it is that Etruscan has nothing to do either with Armenian or with any other European language."[1]

Not more successful is Deecke's attempted translation of the Magliano Inscription,[2] and the question is very neatly summed up by Prof. Sayce, who observes that the fact that men of such acuteness and scholarship as Deecke and Bugge "should have spent so much time and labour over the Etruscan problem without producing results which other scholars can accept, is of itself a sufficient condemnation of their theories and method."[3] The labours of former workers in the field, such as the earlier Italian students, Sir Wm. Betham, Donaldson, the Earl of Crawford, Stickel—who regarded Etruscan as a Semitic dialect—and others, have now only an interest in a historico-literary point of view. The late Rev. Robert Ellis, whose last and posthumous work, *Sources of the Etruscan and Basque Languages*, appeared in 1886, regarded the Etruscans as being "a mixed race of Iberians and Africans", but his opinions do not require any detailed reference. The Rev. John Campbell of Montreal, in his *Etruria Capta*, 1886, announces that he has solved "the Etruscan problem". His method is to read the Etruscan letters syllabically, and he gives translations of various Inscriptions, including that of Magliano. As there is no reason to read the Etruscan letters syllabically, but quite the contrary, it is needless to notice Mr. Campbell's theory in detail; but it is to be remarked that he connects Etruscan with Basque, and somewhat boldly observes, "It is now generally agreed that the Etruscans were a Turanian people."[4] Two other Etruscologists remain to be noticed. Dr. Carl Pauli of Leipzic is the chief of those who study the Inscriptions *in* the Inscriptions, and his works are storehouses of patient comparison and acute sugges-

[1] *The Academy*, Dec. 3, 1887.

[2] *Rheinisches Museum für Philologie* (Neununddreissigsten Bandes, erstes Heft), 1884, p. 141 *et seq.* Of this translation M. Bréal remarks :—"Il y a quelque chose de plus extraordinaire encore que cette traduction : c'est la manière dont elle est justifiée" (*Revue Critique*, 1884, p. 122).

[3] "Etruscan Researches", in *The Academy*, Jan. 9, 1886.

[4] *Etruria Capta*, 2.

tion. He regards the language as Non-Aryan, and as originally connected with Non-Aryan peoples in Southern Asia Minor. He is at his best when refuting the later Aryanistic heresies of his former collaborateur, Dr. Deecke. Amongst his works are *Die etruskischen Zahlwörter*, 1882; numerous important articles in his periodical, *Altitalische Studien*, 1883-7; *Eine Vorgriechische Inschrift von Lemnos*, 1886; and *Die Inschriften nordetruskischen Alphabets*, 1885. In 1874 Canon Isaac Taylor produced his *Etruscan Researches*, which was followed by a pamphlet *On the Etruscan Language*, 1876. His theory is that the Etruscans were a Ugric people, this term denoting "the Turanian tribes of the great Asiatic tableland", and comprising "the Finnic, Samojedic, Turkic (or Tataric), Mongolic, and Tungusic peoples".[1] This view I believe to be the correct one. It is a line of research even now but very slightly worked, whereas the Aryan and Semitic theories of Etruscan have been proved by actual exploration to be valueless. Amongst other works in connection with Etruria and Etruscology may be mentioned Dempster, *De Etruria Regali;* Caylus, *Recueil d'Antiquités Etrusques;* K. O. Müller, *Die Etrusker*, 1877, edit. by Deecke; Dennis (the Pausanias of Etruria), *The Cities and Cemeteries of Etruria*, edit. 1878; Gerhard, *Etruskische Spiegel;* and the all-important work of Fabretti, the *Corpus Inscriptionum Italicarum*, 1867, with the three *Supplements*, and the *Appendice* by Gamurrini.[2]

We observe resemblances by means of comparison, and comparison, to be of any real value, must be scientifically conducted, have constant reference to linguistic laws and the principles of letter-change, and take into account all the available evidence, both internal and external. Forms closely resembling each other are frequently wholly unconnected, whilst forms very dissimilar are often nearly related. The historical sequence of forms is most important, and should always be ascertained if possible; and again, numerous variants alone will enable us to follow a form through its successive avatars, perhaps each more abraded than the last. For, as the breath of heaven wears the hill-tops, so the breath of man, acting on the lines of the Law of Least Effort, wears away the words of human speech. Thus the Akkadian word *timmena*,

[1] *Etruscan Researches*, 26.

[2] *Vide* also R. B. Jr., "Ugro-Altaic Numerals: One-Five", in the *Proceedings* of the Society of Biblical Archæology, Feb. 1888; "The Etruscan Inscriptions of Lemnos", in the same *Proceedings*, April-May, 1888; and "Etruscan Letters", in *The Academy*, Nov. 27, 1886; May 21, Aug. 20, and Nov. 12, 1887; Jan. 14, March 10, and Dec. 1, 1888; and Feb. 9 and May 4, 1889.

'foundation-stone', dwindles through the forms *timmen-timme-timtem-te*, as the English *eal-swa* peaks through *also-alse-als-as*.

It has long been recognised that scarcely any branch of language is of more importance and significance than the numerals. In examining these we find ourselves introduced to most interesting phases of archaic psychology, many of which can be studied in the experience of to-day. Thus Mr. A. H. Keane, in his review of Mr. E. M. Curr's *Australian Race*,[1] observes: "The fact is here clearly established that the bulk of the Australian languages have radicals only for the numerals *one* and *two*. Many get as far as *three*, but Mr. Curr is probably right in rejecting the *four*, which some of his correspondents have furnished, but which either simply means 'plenty', or is due to a misconception on their part." Thus in the Puri dialect of Brazil *three* = *prica*, 'many'. The human frame, with its face, eyes, hands, feet, fingers, and toes, has supplied the requisite abacus for notation. The hand may represent '1' or '5', the hands '2'; '15' may = 2 hands + a foot, and thus on. The linguistic student of numbers will of course consult the works of Pott and Tylor, and, in the present connexion, the important monograph of Schott, *Das Zahlwort in der tschudischen sprachenclasse, wie auch im türkischen, tungusischen und mongolischen.* We have also carefully to consider what are the usual and unusual ways of regarding the same thing. It was always looked at in what was really to the thinker the easiest point of view, whether this may seem so now to us or not. Thus, '3' may be thought of as 2 + 1, 1 + 2, 'many', "that which is beyond" (2), or, again, as 'foot', *i.e.*, (hand + hand) + foot = 3, and so on. So, (hand + hand + eye) + eye may = '4', in which case the '4'-word will be an 'eye'-word, and the other three objects which, in the original idea, make up the number, will be understood; or, again, '4' may be regarded as 2 + 2. '6' will be either 1 + 5 or 5 + 1; in the latter case '7' will be 5 + 2, and '8' will generally be 5 + 3. But 8 and 9 are also often formed by subtraction, being respectively regarded as 10 − 2 and 10 − 1. Nor is this by any means unnatural, for in gesture-language it would be easier to hold up the 10 fingers and then 1 or 2 with some movement denoting subtraction, than to hold up 8 or 9 fingers. In Ostiak '18' = 20 − 2; in Basque, which is very peculiar, '30' = 20 + 10, '40' = 2 × 20, '50' = (2 × 20) + 10, '60' = 3 × 20, '70' = 60 + 10, '80' = 4 × 20, and '90' = 80 + 10. In one African dialect given by Pott, '16' = 20 − 4 With these preliminary considerations we may pass to particulars.

[1] *The Academy*, Nov. 17, 1888, p. 317.

II.

The following Etruscan words are admittedly numerals. Great difference of opinion has prevailed respecting their interpretation; and this is inevitable when the basis of conjecture is either false analogy, or a balancing of more or less faint probabilities:

Cealχls
Cezpa
Cezpalχ
Cezpalχals
Cezpz
Celχls
Ci
Ciemzaθrms
Cizi
Cis
Esal
Esals
Eslem[z]aθrumis
Eslz
Zaθrmisc
Zaθrums
Zal
Zl
Huθ
Huθs
Hut
Θu
Θunesi
Θunz
Maχ
Maχs
Mealχlsc[1]
Muvalχls
Muvalχl
Nurθzi
Sa
Sas
Semφalχls
Semφs

Each of the above 34 somewhat curious forms is fully considered and explained in the present Paper. The forms immediately connected with each other are:

Ci, *Cis*, *Cizi*, *Cie*[mzaθrms], *Ce*[alχls], *Ce*[lχls]
Zl, *Zal*, *Esal*, *Esals*, *Eslz*, *Esl*[emzaθrumis]
Θu, *Θunz*, *Θunesi*
Mealχlsc, *Muvalχls*, *Muvalχl*

Cezpa, *Cezpz*, *Cezpa*[lχ], *Cezpa*[lχals]
Zaθrmisc, *Zaθrums*, *Zaθrms*
Θrmisc, *Θrumis*, *Θrums*, *Θrms*
Sa, *Sas*, *Za*[θrmisc], *Za*[θrums], *Za*[θrms]

Huθ, *Hut*, *Huθs*
Lχ, *Lχl*, *Lχals*
Maχ, *Maχs*
Semφs, *Semφalχls*

[1] "Lord Crauford translates *avils machs mealchlsc*, 'aged 18—a leper'. The decade *mealchl* is, he thinks, related to the Latin *macula*, 'a spot'. What diseases are denoted by such words as *muvalchls*, *cealchls*, and *semphalchls*, he does not inform us. Corssen is quite unable to explain these words as Italic decades. In heroic despair he has broached the astounding theory that they are the names of peculiarly carved coffin ornaments whose particular nature he cannot explain." (Taylor, *On the Etruscan Language*, 17.)

III.

Ere proceeding to a tentative reconstruction of the Etruscan numerals from 1 to 100, it will be desirable to notice, by way of illustration and with some slight particularity, various Akkadian, Kamacintzi, Arintzi, and Kottic numerals. Beginning with the Akkadian (under which I include the Sumerian) as the most ancient known member of the Turanian group, I am, through the kindness of Prof. Sayce and Mr. T. G. Pinches, enabled to give the latest readings of the numerals 1-10, which are as follows :—

1. *Guis, gis, dis, das, gi, ge, as, us, a.* = 'mouth', 'face', *i.e.*, one (man).
2. *Kas, gas.* = the hands. Cf. Ak. *kat*, 'hand', etc.
 Bi. = dem. pron. 'This' (other), *i.e.*, another, a second.
 Mimma, minna, mina, min, minnabi. = "like (the same, ditto, repetition)."
3. *Umus, uvus, vis, bis, is.* = plurality. Cf. Ak. *mes, mis*, 'many', sign of plural.
 Esse = foot.
4. *Saba, sav, sana, san, za (tsa).* } = 'eye'. Cf. Ak. *si*, Zyrianian *si-n*, Samoied *sai*, Ostiak *sé-m*, etc., 'eye'.
 Simu, siv. }
 Nin, ninga. = 'foot'. Cf. Ak. *ne-r, ni-r*, 'foot'.[1]
 Limmu. = 'eye' (*vide sup.*). Cf. Ak. *lim*, 'eye'.
5. *Var, bar, para.* } = the five-fingered hand.[2] A variant of '2'.
 Vas, ia, a. Sa. }
6. *Âs, assa.* *Âs* = *a* + *as*, = 5 + 1 (Sayce).
7. *Sisinna, iminna, imina.* = *ia* + *minna*, = 5 + 2.
8. *Ussa.* = *ia* + *esse*, = 5 + 3.
9. *Isimmu, ilimmu.* = *ia* + *limmu*, = 5 + 4.
10. *Uvun, ugun, gu, u, ga, a.*
 Pur, bur. Cf. Ak. *bur*, 'heap'.

The archaic '1'-word, the oldest known form of which is *guis*, is very closely connected with a number of 'mouth'-words, *e.g.*, Akkadian *gu, zu*, Finnic *suu*, Esthonian and Tcheremiss *su*, Lapponic *ćo-d* ('throat'), Vogul *tu-s*, Ostiak *tu-t*, Magyar *szaj*, Yenissei-Ostiak *xu, xu'o, ku*, Arintzi *kho-n*, etc.

It will be observed that the '10'-word *pur* = 'heap', and that the

[1] *Vide* R. B. Jr., *Ugro-Altaic Numerals.* Comparative List of '4'-words and 'foot'-words.

[2] *Vide* ibid. Comparative List of '5'-words and 'hand'-words.

meaning of the '10'-word *ugun* was similar, is evident from the Turkic *yighyn*, 'heap'. As to the connexion between Akkadian and Sumerian and the Turanian or Altaic languages, Prof. Sayce observes, "No unprejudiced student of linguistic science can resist the conviction that Dr. Hommel's comparison of the Sumerian grammar and vocabulary with the grammar and vocabulary of the Turko-Tatar languages is founded on a solid basis of fact."[1] With *ugun*, cf. the Akkadian *umuna*, '1000', *i.e.*, a great heap. In Akkadian *m* and *v* or *w* are equivalents, and *v* is here interchanged with *g*, *uvun-ugun*.

The Akkadian for '20' is *nis*, which may be formed from *nit-a*, 'man', as *kas*, '2', from *kat*, and on the following line of thought: "Among many and distant tribes, men wanting to express 5 in words called it simply by their name for the *hand*, which they held up to denote it. In like manner they said *two hands* or *half a man* to denote 10; the word *foot* carried on the reckoning up to 15, and to 20, which they described in words as in gesture by the *hands and feet* together, or as *one man*."[2]

The Akkadian for '100', *me*, *eme*, means primarily 'voice', 'to call', the cuneiform ideograph being originally the drawing of a tongue, so that '100' is a number of people assembled together.

As conjectural forms Mr. Pinches gives *asgu* (=1+10=11), *mingu* (12), *esgu* (13), *limgu* (14), and so on.

I will next take two ancient sets of North Asian numerals, preserved by the learned and exact traveller Strahlenberg,[3] namely those of the "Kamacintzi, who live on the River Mana, in Siberia", and those of the "Arintzi, who call themselves *Ara*, or *Arr* [cf. the Akkadian *eri*, 'man', Tatar *are*, etc.], and live on the River Jenesei." These two small and ancient tribes are, I believe, long since extinct; and this circumstance illustrates the chief difficulty in dealing with a monumentally-preserved language like Etruscan. Most of the directly illustrative forms have perished in the course of time. These two sets of numerals are very closely connected with each other, but also display some remarkable differences, and some highly instructive instances of what I may call 'abradation'.

Kamacintzi	Arintzi
1. *Chu-odschae.*	*Ku-isa.*

Here we have the Ak. *guis*; cf. the Turkic *aghyz*, 'mouth',

[1] *Religion of the Ancient Babylonians*, 429.
[2] Tylor, *Primitive Culture*, i, 224.
[3] *History of Siberia*, Eng. edit., 1738.

ïuz, 'face'. Other Altaic '1'-forms are the Yenissei-Ostiak *kusa-m*, *χuse-m*, *xusa*, *xus*, and the Kottic *huca*.

2. *Y-nae.* *K-i-nae.*

The Ak. *m-ina*, *k* or *g* at times = *m* or *v*,[1] as above in the Ak. *uvun*, *ugun*; Kottic *ina*,[2] Etruscan CI, *cine*.

3. *Ton-g-a.* *Thun-g-a.*

A novel formation, evidently connected with the Arintzi *Thien-g*, 'eye', one of the few words of the language preserved by Strahlenberg. Cf. the Turkic *'aïn*, 'eye', probably abraded from an earlier (*th*)*aïn*(*g*), and the Chinese *yen*. As noticed, in Akkadian 'eye' is used as a '4'-word.

4. *Scha-gae.* *Sche-ya.*

The Ak. *sa-ba*, *za* (*tsa*),[3] Kottic *se-ga*, Etruscan SA.

5. *Hka-gae.* *Chal-a.*

Here the Kam. *hka* = the Ar. *hka-l*, and the Turko-Tataric word *kar*, *kol*, 'arm', 'hand', supplies the basis of the concept. Cf. the Tchagatai *kol*, 'hand', the Tshuwash *kul*, 'arm', the Osmanli *kol*, 'arm', the abraded Turkish *el*, 'hand', and *el-li* (= *al-lig*, Etruscan L*χ*, *le**χ**a*, *i.e.*, 5 × 10), '50'. The mode of formation is the same as that of the Ak. '5', but another 'hand'-word is employed. The Kottic 5-form is *xe-ga*, which represents a prior *xel-ga*.

6. *Hkel-usa* (5 + 1). *Y-ga* (5 + 1).

In the Kam. *hkel-usa* the *l* has been preserved, as in the Ar. *chal-a*. *Usa* = the Ar. *isa* in *kuisa*, '1', the Kam. *odschae*, the Ak. *us*, *as*.

The Ar. '6'-form *y-ga* deserves careful attention. It will be observed that in Ak. *a* is equally an abraded '1'-form and an abraded '5'-form, whilst *as* is an abraded '1'-form and the '6'-form; and that *as*, the '6'-form, contains *a*, the '5'-form, without showing it. So, here, *y-ga* = the *i-sa* in *kuisa*, '1', and the *chal*, '5', Kam. *hkel*, has fallen away and is understood, so that *y-ga* literally = (5) + 1. There are many examples in numerals of a portion of the number being thus unexpressed. The Ar. *y-ga*, therefore, = the Ak. *a-ssa*, = (5) + 1 = 6, the Kam. *u-sa*, only that in Kam. the '5' (*hkel*) is expressed. Such a result which, I think, is

[1] *Vide* Schott, *Über das Altaï'sche oder Finnisch-Tatarische Sprachengeschlecht*, 61.

[2] *Vide* Castrén, *Versuch- einer Jenissei- Ostjakischen und Kottischen Sprachlehre*, 1858.

[3] Sayce, *Assyrian Grammar*, Syllabary, No. 441.

beyond reasonable doubt, can only be arrived at by the most careful comparison of variant forms, and I shall have occasion to again refer to the principle. The Kottic '6' is *xeluca.*

7. *Hkèl-ina* (5 + 2). *U-na* (5 + 2).

Ina = the Kam. *ynae*, '2', and *una*, standing for *chal-una* = the Ar. *(k)inae*, '2'. Kottic *xelina.*

8. *Chel-tonga* (5 + 3). *Kina-minschau* (10 − 2).

The form *chel* closely approaches the Ar. *chal* in *chala*, '5'; the Kottic form is *xaltonga.* But at this number a remarkable difference appears between the Kam. and Ar. systems. *Minschau*, '10', is a word to which I have to refer when speaking of the Ar. numeral for '80', and so merely observe in passing that here we meet with the principle of subtraction in numeral-formation, *kina-minschau* meaning "2 from 10". The circumstance affords also an excellent illustration of the remarkable differences in user which are frequently presented by adjoining and mainly very similar dialects.

9. *Hwelina* (5 + 4). *Kuisa-minschau* (10 − 1).

The Kam. *hwe-lina* = the Ak. *ia-limmu*, '9'. There does not appear to be a variant form in Ak. for the aspirate; thus the same form = *a*, *'a*, and *ha.* *M* and *n* are at times interchangeable, as in the Ak. *mimma*, *minna*, '2'.

10. *Haga.* *Hioga.*

The Ak. *ugun* (*hugun*) and Kottic *haga.* *Hioga* is thus a second distinct '10'-form employed by the Arintzi, *minschau* being the first.

11. *Haga-chuodschae* (10 + 1). *Hkog-kuisa* (10 + 1).

The Kottic *hagal-huca.* If we may argue by analogy I should conjecture that the original and unabraded Akkadian for '11' was *ugun-guis* (10 + 1), rather than *guis-ugun* (1 + 10) = *asgu.*

12. *Haga-inae* (10 + 2). *Hkog-ina* (10 + 2).

Hkog is, of course, an abbreviation of *hioga.*

20. *Yn-tung* (2 × 10). *Kin-tung* (2 × 10).

Here we meet with a third '10'-form *tung*, the Ostiak *jong*, *jang*, *jeung*, Yakute *djean*, *uon*, Turkic, Koibal, and Karagass *on*, Tunguse *zan*, Mantchu *dchouan*, Yenissei *θjun*, and Etruscan θRUM, perhaps originally all merely variants of the Ak. u-*gun.* In the Magliano Inscription we thrice meet with the Et. word χIMθM, which Deecke, on Aryanistic principles, renders *centum*, but in which we may, I think, see χIMθRUM = the Ar. *kin-tung;* and

this χIMθM must surely be the χIMθ of the famous and untranslated Cippus Perusinus, longest of Etruscan Inscriptions. The Kottic form *intukng* is curious, the *k* appearing in an unexpected place.

30. *Tonga-tu* (3 × 10). *Tong-tung* (3 × 10).

In *tonga-tu* the '10'-form *tung* is abraded, and an exact parallel occurs in Jurak-Samoied, where the '10'-form which in Ostiak appears as *jong*, is found as *ju*. The Kottic '30'-form *intukngu*ca, which must mean "20 + 1 (ten)", *huca* being, as noticed, the Kottic '1', is very singular, and is exactly paralleled by the Kam. '40'. The Basque '30', *hogei-eta-hamar* or *oguei-t-amar*, = 20 + 10.

40. *Tonga-tu-chuodschae* (3 × 10 + 1 ten). *Scheig-tung* (4 × 10).

This remarkable Kam. decade-formation is unique in the list, all the other decades being formed regularly and in the usual way; and, similarly, the Kottic '30'-form stands alone and as a special formation in that language. The Ar. *scheig-tung* is the Kottic *seg-tukng*, the Etruscan ZA-θRUM, and Yenissei *sai-θjun*.

50. *Hkog-tugu* (5 × 10). *Kuwull* (10 × 5).

Hko-g = the '5'-form *hka-g-ae*, and *tugu* is a variant of *tung*. In the Ar. *ku-wull* we find the '10'-form *ku*, Ak. *gu*, placed first, whilst *wull* = *chal-a*, '5'.

60. *Hkelusa-tu* (6 × 10). *Ui-tung* (6 × 10).

Kottic *xelus-tukng*. *Ui* = *Y*(*-ga*), '6'.

70. *Hkelina-tu* (7 × 10). *Un-tung* (7 × 10).

80. *Cheltong-tu* (8 × 10). *Kina-minschau-tung* (2 from 10 × 10).

Cheltong-tu is the Kottic *xalton-tukng*, but the Ar. forms for '80' and '90' are wholly different and based on the Ar. '8' and '9' forms. The ancient word *minschau* means '10', but is, in origin, a compound of two words, each of which meant '10', namely, (1) *min*, which is identical with the Samoied *mûn*, *mûne*, *munö*, 'finger', and (2) *schau*, which = "die Zehn repräsentirendes Suff. *-scha*",[1] which appears in Mantchu as *schy*, the Chinese *shĭh*, '10'. Thus *minschau* = (originally) "the-fingers-ten"; but the word *min* subsequently obtains the secondary meaning '10', as *e.g.*, in the Zyrianian *nelja-myn*, '40', *i.e.*, 4 × 10. It is further to be observed that the '10'-form *min*, *myn*, appears in the variants *mis*, *mys*, *mes*[2]; and as each part of the word *minschau* thus means '10', the syllables could be transposed and yet the sense retained, just as it would be immaterial whether we said "fingers ten" or "ten fingers". This is

[1] Pott, *Zählmethode*, 51.

[2] *Vide* Schott, *Das Zahlwort*, 20.

actually what has occurred, *e.g.*, in Zyrianian. Here '8' is *kök-jamys*, *i.e.*, '2' (*kyk*) from '10'; *ja-mys* = *schau min*, or *mis.* I am particular in calling attention to this remarkable word for '80' because it constitutes a most convincing link between the Arintzi and Etruscan languages. One great difficulty in dealing with Etruscan arises from abbreviations, which, naturally enough, are constantly found in sepulchral and other inscriptions. The word *kina-minschau-tung* appears in Etruscan as CIEMZAθRM, the abbreviated form of an original CI*n*E-M*ez*ZA-θR*u*M, which we are thus enabled by comparison to restore. *Mez-za* = the Zyrianian *ja-mys*, and the reading is suggested by the well-known partiality of Etruscan for a *z*-sound. The chances against the above parallel being accidental must be *x* to 1.[1]

90. *Hwelin-tugu* (9 × 10). *Kuisa-minschau-tung* (1 from 10 × 10).

100. *Duss* (10 × 10). *Yuzz* (10 × 10).

This form appears in the Turkic *yüz* (variants of which in different dialects are *jo-f*, *ju-f*, *gu-f*, *sus*, *su-r*), *ïuz*, the Yakute *suss*, *sys*, the Kottic *ujax*, the Koibal *djus*, the Karagass *tjus*, the Yenissei-Ostiak *kies*, the Kamassin *tjus*, the Yenissei-Samoied *ju*, the Jurak-Samoied *ju-r*, the Tawgy-Samoied *ji-r*, the Zyrianian *sjo*, *so*, the Votiak *su*, the Permian *das-das* (10 × 10) the Magyar *szaz*, etc. The ordinary way of regarding 100 is 10 × 10, and Strahlenberg gives the Tangubti '100' word as *dsgu-dsgu*. This at once suggests 10 × 10, and when we examine the form *dis-gu*, we find that in most remarkable parallel with *minschau*, each syllable in it at one time meant '10', and afterwards the combination came to bear that meaning. Thus *ds*, *dis*, is a familiar Turanian '10'-form. "Die erste zehnwurzel sei *t-s*, *d-s*", observes Schott,[2] *e.g.*, the Zyrianian *das*, the Magyar *tiz*, etc. *Gu* we have already met with as a '10'-word, the Ak. *gu*, Kam. *haga* (= Ak. *ugun*), etc.

1000. *Hag-duss* (10 × 100). *Kog-yuzz* (10 × 100).

Hag = Kam. *haga*, '10'; *kog* = the Ar. *hioga*, '10', which appears in '11' as *hkog*. The Kottic form is *hax-ujax*. This word will complete the notice of these numerals, which may serve as a useful preliminary to the consideration of the Etruscan forms, known and probable, regarding the general question both from the psychological and linguistic standpoints.

[1] *Vide inf.*, p. 398. [2] *Das Zahlwort*, 12.

IV.

The following tentative and undogmatic list of Etruscan numerals is based alike upon such internal evidence as I have been able to obtain from the monuments, and upon external comparison on the lines already indicated, and in the direction first suggested by Canon Isaac Taylor. In the list admitted numerals are written in Roman capitals, Etruscan words not certainly numerals in italics, forms not actually known but suggested by a strict analogy and highly probable, in italics preceded by an asterisk, and forms not actually known and more doubtful, in italics preceded by an asterisk and enclosed in square brackets. I think it best to give the forms by themselves, in the first instance, that they may be studied together as a whole, and add some observations on them in the following sections.

Proposed Restoration of the Etruscan Cardinal Numbers from 'One' to a 'Hundred'.

1. MAχ (*vide* 41, 71, 91).
2. CI, **cine*. Cf. Fabretti, No. 2339: *cizi*, 'twice'.
3. ZAL, ZL, ESAL. Cf. Fabretti, No. 2057: *eslz*, 'thrice'.
4. SA. Cf. Fabretti, No. 2104: *sas*, '4th'.
5. θU, **θun*. Cf. Fabretti, *Sup.*, i, No. 387: *θunz* (otherwise *θunesi*; *vide* 35), "5 times".
6. HUθ, HUT. = 5 + 1. Cf. Fabretti, *Sup.*, ii, No. 116: *huθs*, '6th'.
7. CEZ, CEZ-PA. = 5 + 2. Cf. Fabretti, *Sup.*, i, No. 387: *cezpz*, "7 times".
8. CIEM, *cim*, *χiem*, *χim*, *χm*. = 2 from 10 (*vide* 80).
9. SEM, SEM-φA. = 1 from 10. Cf. Fabretti, No. 2033 *bis* Dc: *semφs*, '9th'.
10. NURθ, *tesan*. Cf. Fabretti, No. 2339: *nurθzi*, "10 times". Other occurring '10'-forms are Lχ (*leχa*, *liχa*), θRUM, and *mezza*
11. [**tesmaχ*]. = 10 + 1.
12. [**teci*]. = *tesci*, = 10 + 2.
13. [**tezal*]. = 10 + 3. Cf. Et. *tuzl*.
14. [**tesa*]. = 10 + 4. Cf. Et. *testsa*.
15. *teθu*. = *tesθu*, = 10 + 5.
16. [**tesuθ*]. = *teshuθ*, = 10 + 6.
17. [**tece*]. = *tescez*, = 10 + 7. Cf. Et. *tece*.
18. [**tecim*]. = *tesciem*, = 10 + 8.
19. *tesamsa*. = *te* (san)-*sam*(ez)*za*, = 10 + 9.

20. *χimθm, χimθ, *χimθrum.* = CI*n*-θRUM, = 2 × 10.

CEALχ, CELχ. = CI + Lχ, = 2 × 10. Unabbreviated form—*cealeχa.*

21. **maχ-cealeχa.* = 1 + 20. Cf. Fabretti, *Sup.*, ii, No. 112: *cealχls*, '20th'.

22. **ci-cealeχa.* = 2 + 20. Cf. Fabretti, No. 2108: *cis cealχls*, '22nd', = "2nd + 20th".

23. **esal-cealeχa.* = 3 + 20.

24. **sa-cealeχa.* = 4 + 20.

25. **θun-cealeχa.* = 5 + 20.

26. **huθ-cealeχa.* = 6 + 20. Cf. Fabretti, *Sup.*, i, No. 437: *huθs celχls*, '26th'.

27. **cez-cealeχa.* = 7 + 20.

28. **cim-cealeχa.* = 8 + 20.

29. **sem-cealeχa.* = 9 + 20.

30. MUVALχ, MEALχ. = 3 × 10. Variants, both used. Unabbreviated forms—*muvaleχa*, *mealeχa.*

31. **maχ* { *-muvaleχa* / *-mealeχa* } = 1 + 30. Cf. Fabretti, No. 2340: [*m*]*aχs mealχlsc*, '31st'.

32. **ci-muvaleχa.* = 2 + 30. Cf. Fabretti, No. 2335*d*: *cis muvalχl* . . ., '32nd'.

33. **esal-muvaleχa* = 3 + 30.

34. **sa-muvaleχa.* = 4 + 30.

35. **θun-muvaleχa.* = 5 + 30. Cf. Fabretti, No. 2335*a*: *θunesi muvalχls*, '35th'.

36. **huθ-muvaleχa.* = 6 + 30. Cf. Fabretti, *Sup.*, ii, No. 115: *huθs muvalχls*, '36th'.

37. **cez-muvaleχa.* = 7 + 30.

38. **cim-muvaleχa.* = 8 + 30.

39. **sem-muvaleχa.* = 9 + 30.

40. ZAθRUM. = 4 × 10.

41. **maχ-zaθrum.* = 1 + 40. Cf. Fabretti, *Sup.*, i, No. 388: *maχs zaθrums*, '41st'.

42. **ci-zaθrum.* = 2 + 40. Cf. Deecke, *Bezz.*, i, 260, No. 14: *cis zaθrmisc*, '42nd'.

43. **esal-zaθrum.* = 3 + 40.

44. **sa-zaθrum.* = 4 + 40.

45. **θun-zaθrum.* = 5 + 40.

46. **huθ-zaθrum.* = 6 + 40.

47. **cez-zaθrum.* = 7 + 40.

48. **cim-zaθrum.* = 8 + 40.

49. **sem-zaθrum.* = 9 + 40.

50. **θunχulθ.* = 5 × 10. Unabbreviated forms — *θunχuleθe, θunχuleθa, θunχulexa.* Cf. Et. *θunχulθl.*

51. **maχ-θunχulexa.* = 1 + 50.

52. **ci-θunχulexa* = 2 + 50.

53. **esal-θunχulexa.* = 3 + 50.

54. **sa-θunχulexa.* = 4 + 50.

55. **θu-θunχulexa.* = 5 + 50.

56. **huθ-θunχulexa.* = 6 + 50.

57. **cez-θunχulexa.* = 7 + 50.

58. **cim-θunχulexa.* = 8 + 50.

59. **sem-θunχulexa.* = 9 + 50.

60. **huθrum.* = 6 × 10.

61. **maχ-huθrum.* = 1 + 60.

62. **ci-huθrum.* = 2 + 60.

63. **esal-huθrum.* = 3 + 60.

64. **sa-huθrum.* = 4 + 60.

65. **θun huθrum.* = 5 + 60.

66. **huta-huθrum.* = 6 + 60.

67. **cez-huθrum.* = 7 + 60.

68. **cim-huθrum.* = 8 + 60.

69. **sem-huθrum.* = 9 + 60.

70. ESLEM[Z]AθRUM. = (3 from 10) × 10. Unabbreviated form —*esale-mezza-θrum.* Cf. Gamurrini, No. 658: *eslem*[*z*]*aθrumis.* CEZPALχ. = 7 × 10. Unabbreviated form—*cezpalexa.*

71. **maχ-cezpalexa.* = 1 + 70. Cf. *Mon. incd.*, viii, Tab. XXXVI, ap. Pauli, *Die et. Zahlwörter*, 8: *maχ cezpalχ*, '71'.

72. **ci-cezpalexa.* = 2 + 70.

73. **esal-cezpalexa.* = 3 + 70. Cf., Fabretti, *Sup.*, i, No. 387: *esals cezpalχals*, '73rd'.

74. **sa-cezpalexa.* = 4 + 70.

75. **θun-cezpalexa.* = 5 + 70.

76. **huθ-cezpalexa.* = 6 + 70.

77. **cez-cezpalexa.* = 7 + 70.

78. **cim-cezpalexa.* = 8 + 70.

79. **sem-cezpalexa.* = 9 + 70.

80. *CIEMZAθRM. = (2 from 10) × 10. Unabbreviated form—*cine-mezza-θrum.* Cf. Fabretti, No. 2071: *ciemzaθrms*, '80th'.

81. **maχ-cinemezzaθrum.* = 1 + 80.

82. **ci-cinemezzaθrum.* = 2 + 80.

83. **esal-cinemezzaθrum.* = 3 + 80.

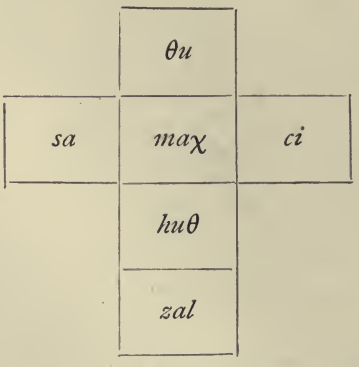
84. **sa-cinemezzaθrum.* = 4 + 80.

85. **θu-cinemezzaθrum.* = 5 + 80.

86. **huθ-cinemezzaθrum.* = 6 + 80.
87. **cez-cinemezzaθrum.* = 7 + 80.
88. **cim-cinemezzaθrum.* = 8 + 80.
89. **sem-cinemezzaθrum.* = 9 + 80.
90. SEMΦALχ. = 9 × 10. Unabbreviated form—*semφaleχa.*
91. **maχ-semφaleχa.* = 1 + 90. Cf. Fabretti, No. 2070 : *maχs semφalχls,* '91st'.
92. **ci-semφaleχa.* = 2 + 90.
93. **esal-semφaleχa.* = 3 + 90.
94. **sa-semφaleχa.* = 4 + 90.
95. **θun-semφaleχa.* = 5 + 90.
96. **huθ-semφaleχa.* = 6 + 90.
97. **cez-semφaleχa.* = 7 + 90.
98. **cim-semφaleχa.* = 8 + 90.
99. **sem-semφaleχa.* = 9 + 90.
100. **vurθ.*

V.

The Numerals 1-6.—In 1848 a pair of Etruscan dice were discovered near Toscanella, marked on their six sides, not as usual with pips, but with the six words *maχ-zal, ci-sa, θu-huθ.* It is obvious, and now[1] universally admitted, that these words are the Etruscan names of the numerals 1-6; and the researches of Signor Campanari have shown that Etruscan dice are marked 1-3, 2-4, 5-6. As Canon Taylor has long since convincingly proved, the Inscription Fabretti, No. 2055, shows that *ci* means '2', because it is there applied to a certain number of children, and two names are given and two ages, both in figures.[2] Hence *sa* means '4.' The words on the dice appear as follows :—



[1] Corssen read these words as an Inscription :—*Machthuzal huθ cisa,* which he translated, "Magnus donarium hoc cisorio facit."

[2] Vide *Etruscan Researches,* 191.

As regards *maχ*, there is a remarkable consensus of opinion, based on various reasons. Campanari, Ellis, Deecke (who formerly thought otherwise), and Taylor are clear that it means '1', whilst I understand Pauli's conclusion to be that the chances are 2 out of 3 that it means '1'. This combination of opinion is in itself entitled to very great weight, and my own investigations induce me to agree with it absolutely. But further: we have seen that *ci* means '2'; it occurs twice in the expressions *clenar ci*[1] and *ci clenar*,[2] "two sons" or 'children', *clen-ar* being a plural form; and in another Inscription[3] we meet with the expression *clenar zal*. Now on Etruscan dice 1, 2, 3, and 4 follow each other in order, and *ci* being '2' and *sa* '4', *maχ*, the number between them must be '1', or '3'. But *zal* must be '3', because it is applied to the plural form *clenar*, so that *cle-nar zal* will mean "children 3", and, further, there is no instance in which a plural form is applied to *maχ*. Hence *maχ* = '1'.

As regards *zal*, turning to authority we find that Campanari, Ellis, Deecke, and Taylor consider it to mean '3', which, as above shown, it must mean. Pauli alone considers it to mean '2', a conclusion arrived at independently of any linguistic comparisons, and, also, in my opinion vitiated by a double error, namely, (1) he has not taken into account Campanari's law of the opposite numbers of Etruscan dice. The opposite numbers are 1-3 in pips and *maχ-zal* in words; hence, *maχ* being '1', *zal* cannot be '2'. And (2) he has fallen into a mistake in connection with the numbers mentioned in the Cippus Perusinus. This at present untranslatable Inscription speaks of *naper xii*, "12 grave-niches", and also of *naper zl*, *hut naper*, and *naper ci*. Hence, not perhaps unnaturally, it has often been supposed that the three numerals *zal*, *hut*, and *ci*, must together = 12. Nothing, however, can really be more inconclusive. Arguing on similar lines, I might equally well suppose that the tomb-founder made a grave-niche for himself and 11 others for members of his family, and thus arrive at the meanings for these three numerals which I believe them to have possessed, namely, *zal*, '3', *hut*, '6', and *ci*, '2'. But this would be equally inconclusive, although very possible; whilst the evidence with respect to *ci* shows that Pauli's view is absolutely incorrect. It will, of course, be noticed that the foregoing definite results are arrived at altogether independently of external linguistic evidence, which

[1] Fabretti, No. 2055.
[2] Ibid., No. 2340.
[3] Ibid., No. 2056.
[4] Ibid., No. 1914.

latter confirmatory proof is both abundant in material and conclusive in its character, as will further appear.

The remaining dice-numerals are *θu-huθ*, which must mean 5 — 6 or 6 — 5. Pauli thinks *θu* may be '5' and *huθ* '6', and convincingly refutes the Aryanists who wish to connect *θu* with the Lat. *duo*, and *huθ* with the Aryan *kvet*. We possess the decade-forms of 20, 30, 40, 70, 80, and 90, and hence, again, it is clear that these two words must mean '5' and '6'; but which is which internal evidence does not, I think, absolutely show. Hence we must summon linguistic comparison to our aid, and the result will abundantly justify Canon Taylor's conclusion that *θu* ='5', and *huθ*, '6'.

MAχ. 'One'. Basis-concept:—The 'Finger' or 'Hand'. Comparative Table:—

Tungusic.—*o-m-m-u-k-o-n*
u-m-m-u-k-o-n
u-m —u-k-o-n Cf. *hunakan* } 'finger'.
o-m —u-k-o-n *unakan* }
a-m —u-k-o-n
o-m —o-k-o-n
a-m ——k-a
u-m ———u-n Cf. Ostiak-Samoied *mun, mune,*
u-m ———o-n *muno,* 'finger'.
m ——u-k-o-n
a-m ——u
Mordvin.— *v ——ai-k-e*
v ——ei-k-e
v ——e
Etruscan.— *m —— a-χ* Cf. Tatar *bar-maχ*, 'finger',
Mokscha.— *i-fk-a* Turkic *par-maq.*
fk-a
Vogul.— *a-kv-a*
Ostiak-Samoied.— *o-k-e-r*
o-k-u-r
o-kk-a-r
Zyrianian.— *o-t-i-k*
o-t-i
o-t
Permian.— *o-t-y-k*
Votiak.— *o-d-y-g*
o-g

Magyar. —	*e-ck-i* *e-g-y*	} Cf. Mag. *ujj*, 'finger'.
Lapponic. —	*a-kt*	
	a-kt-a	
Finnic. —	*y-ks-i*	
Esthonian. —	*u-ks*	
Tcheremiss. —	*i-k*	
Ostiak. —	*i-t*	
Akkadian. —	*i-kd* *i-d*	} Cf. Ak. *id*, 'hand'.
Assyrian. —	*e-d-u*	} Loan words.
Hebrew. —	*i-kh-itu* *e-kh-od* *a-kh-at*	} Loan words.
Kamassin. —	*o-b*	
	o-m	
Jurak-Samoied. —	*o-b*	
	o-p-oi	
Tawgy. —	*o—ai*	
Yenissei. —	*ô* (most abraded form).	
Mantchu. —	*y*(-ga)	
Chinese. —	*yih*	

From the first syllable of the Tatar *bar-maχ*, 'finger', come the Yakute and Turkic *bir*, Koibal *ber*, and Karagass *birà*, 'one'. It is only a thorough tabular comparison which thus enables us to detect the variant and abraded forms.

CI. 'Two'. Basis-concept:—The Two Hands—Repetition.

Akkadian. —	*m-i-n-a*	
Yenissei. —	*k-i-n-a*	
Arintzi. —	*k-i-n-ae*	
Etruscan. —	*c-i-n-e*	
	c-i	Cf. Zyrianian *ki*, 'hand'.
Kamacintzi. —	*y-n-aẽ*	
Kottic. —	*i-n-a*	
Yenissei-Ostiak. —	*ye-n-a-m*	
	y-n-a-m	
	ye-n-a-ng	

For numerous instances of Turanian '2'-words and 'hand'-words, *vide* Taylor, *Etruscan Researches*, 167 *et seq.*; Lenormant, *Chaldean Magic*, 300-1; R. B. Jr., *Ugro-Altaic Numerals: One-*

Five (in the *Proceedings* of the Society of Biblical Archæology, February 1888).

ZAL. 'Three'. A general Ugro-Altaic concept:— (Hand + hand) + Foot.

Akkadian. —	*e-s-s-e*	Cf. Ak. *essâ*, 'foot'.
Etruscan. —	*e—s-a-l*	
	z-a-l	
	z—l	
Yukagir. —	*j-a-l*-on	
Tungusic. —	*g-i-l*-an	
	i-l-an	
	e-l-an	
Finnic. —	*k-o-l*-me	Cf. Buriat *kol*, 'foot'.
Mokscha. —	*k-o-l*-ma	Cf. Mongol *kul*, 'foot'.
Mordvin. —	*k-o-l*-mo	
Esthonian. } — Lapponic. }	*k-o-l*-m	
Nogai Tatar. —	*o-l*	Cf. Tungusic *al*-gan, 'foot'.
Vogul. —	*k-o-r*-om	Cf. Ostiak *kur*, 'foot'.
Magyar. —	*h-a-r*-om	Cf. Tungusic *hal*-gan, 'foot'
Basque. —	*h-i-r*-u	
Zyrianian. —	*k-u-j*-im	
Surgut. —	*k-u-d*-em	
Ostiak. —	*x-u-d*-em	
Tcheremiss. —	*k-u*—m	

L final at times disappears in Akkadian, *e.g.*, *mal-ma*, *pil-pi*, *bil-bi*, etc. Perhaps an original final *l* in *esse-l*, *essa-l*, reappears in the Assyrian '3'-form *sal*-si, *sal*-satu, which may be a loan-word. Mr. Bertin remarks, "This root [*sal-si*] was either chosen for 'three' at a later period, or has undergone such changes that it is difficult to detect in some [Semitic] dialects."[1] I should be more inclined to regard it as borrowed from the Akkadian, just as the Assyrian *estin*, '1', is the Akkadian *as*, '1',+ *ta-a-an*, 'number', *i.e.*, "number 1".

The *l-r* change is familiar, *e.g.*, the Susianian Lagama-*l*—Lagama-*r*; the Mongol *delge-r—derge-l*, etc.

B, *g*, *d*, *j*, *q*, *w*, *x*, and *y* do not occur in Etruscan.

[1] *The Assyrian Numerals* (*Trans.* Soc. Bib. Archæol., vii, 376).

SA. 'Four'. A general Ugro-Altaic concept :— (Hand + hand + eye) + eye.

Akkadian. —	*s-a-b-a*	
	s-a-v	
	s-a-n-a	
	s-a-n	Cf. Ostiak *sem*, 'eye'.
	s-a	Cf. Samoied *sai*, 'eye'.
	z-a	
	s-i-v	Cf. Akkadian *si*, 'eye'.
	s-i-m-u	Cf. Zyrianian *sin*, 'eye', Tcheemiss *sinza*.
Etruscan. —	*s-a*	Cf. Jurak Samoied *saeu*, 'eye'.
Yenissei. —	*s-a* (-gem)	Cf. Lapponic *sa-lbme*, 'eye'.
	s-e (-ga)	
	s-i (-em)	Cf. Finnic *si-l-ma*, 'eye'.
	s-i (-a)	Cf. Kamassin *sima*, 'eye'.
	tsch-a (-ja)	Cf. Ostiak Samoied *saiji*, 'eye'.
Kamacintzi. —	*sch-a* (-gae)	
Arintzi. —	*sch-e* (-ya)	
Mantchu. —	*ss-i* (-ggae)	
Chinese. —	*sz-e*	Cf. Magyar *szem*, 'eye'.
Siamese. —	*s-i*	Cf. Yenissei-Samoied *sei*, 'eye'.

θU. 'Five'. Basis concept :—the Hand, as having five fingers.

As Canon Taylor has pointed out, the following Samoied '6'-forms remarkably illustrate the meaning of the Etruscan *θu* as '5' :—

Ostiak Samoied.—	*muk-te-t*	= Etruscan *maχ-θu*, = 1 + 5, = 6.
	muk-te	
	muk-tu-t	
	muk-te-ng	
Tawgy. —	*ma-tu*	
Yenissei. —	*mo-tu*	
Kamassin. —	*muk-tu-d*	
	muk-tu-n	
Jurak. —	*ma-t*	

Another '5'-form is now used in Samoied instead of this earlier *tu*, *tun*. The following are some '5'-words :—

Akkadian. —	*s-a*	Cf. Akkadian *su*, 'hand'.

Yenissei-Ostiak. —	*x-a*	
	x-a (-ja)	Cf. Vogul *tu-la*, 'finger'.
Buriat. —	*t-a* (-ban)	Cf. Kamtchatkan *to-no*, 'hand'.
Tungusic. —	*t-o-n* (-ga)	Cf. Yenissei *ton*, 'hand'.
	t-u-n (-ya)	Cf. Permian *tschun*, 'finger'.
Etruscan. —	*θ-u*	Cf. Lapponic *tju-te*, 'finger'.
	θ-u-n (-z) = "five times".	

Similarly, the Basque *bortz*, '5', = *bihatz*, 'thumb', 'hand'. *S-t* is a not unusual Turanian letter-change, *e.g.*, Finnic *s*-üpi, *s*-eiwäs, Esthonian *t*-up, *t*-eiwas. In Et. *t* often becomes *θ*, which latter again often = the Lat. *s*; *e.g.*, Et. *lar-θ* = Et.-Lat. *lar-s*, Et. *naφo-θ* = Lat. *nepo-s*, etc.[1]

HU*θ*. 'Six'. Regarded as 5 + 1.

Some have supposed that the following '6'-words were formed from a lower number by letter-variation, a supposition which I regard as being in itself exceedingly improbable. The human mind has almost invariably moved on the line of least effort, although some things are easier to one generation and some to another, and hence obscurity often arises. But the natural and easiest way to regard '6' is either as 1 + 5 or 5 + 1. The numerals of various peoples present us with numerous examples of each of these reckonings; and the following '6'-words have at times been regarded as forming 1 + 5. I have carefully considered this view, and am compelled to reject it on its own merits; and do not doubt that the forms represent "5 + 1". I was led, in the first instance, to pay special attention to the point from the circumstance that the '7'-forms clearly represent 5 + 2, and, when such is the case, '6'-forms = 5 + 1. The '6'-forms in question are :—

Akkadian. —	*a-s* *h-a-s*	} = *a* + *as*, = 5 + 1.[2]
	a-s-s-a	
Yenissei-Ostiak. —	*a-s*	
Kamacintzi. — (hkel)	*-u-s—a*[3]	
Kottic. — (xel)	*-u-c—a*	
Arintzi. —	*y-g—a* = (5) + 1.[3]	
Finnic. —	*k-uu-s—i*	

[1] *Vide* R. B. Jr., *The Etruscan Inscriptions of Lemnos*, 323-4.
[2] *Vide sup.*, p. 381. [3] *Vide* remarks, *sup.*, p. 383.

Esthonian. —	*k-uu-s*
Ostiak. —	*k-u-t*
	x-u-t
Tcheremiss. —	*k-u-t*
Lapponic. } —	*k-o-t*
Vogul. }	
Mordvin. —	*k-o-t—o*
Votiak. —	*k-ua-t*
Zyrianian. —	*k-vai-t*
Permian. —	*k-va-t*
Magyar. —	*h-a-t*
Etruscan. —	*h-u-t*
	h-u-θ

The Ak. *as*, *has*, '6', is thus, as shown, identical with the Ak. *as*, '1', this latter being an abbreviation of an earlier *guis*, Ar. *kuisa*, Kam. *chuodschae ;* and, similarly, the Yenissei-Ostiak *xusä*, '1', reappears in the Yen.-Ost. *as*, '6', and the Kottic *huca*,' 1', in the Kottic (xel)-*uca*, '6'. In the Ar. *y-ga*, the '5'-form has dropped out, just as it is swallowed up in the Ak. form. The Ak. form reappears in the other dialects, preceded by the guttural *k*, which in Mag. changes to *h*, *e.g.*, Ak. *χana*, *χa*, 'fish', Finnic *kala*, Lapponic *guolle*, Tcheremiss *kol*, Mordvin *kal*, Vogul *kul*, Mag. *hal*. The *s-t* change, above noticed, also appears. In Akkadian *u* and *v* are often interchangeable[1] (cf. the Vot. *kuat*, Zyr. *kvait*), and the same principle obtains in Etruscan[2]; in the former language *m* = *v*, or *w ;* and in the latter also *m* at times = *v*.[3]

CEZ, CEZ-PA. 'Seven'. Regarded as 5 + 2.

In the following list, the forms, except the Akkadian, are the older forms given by Strahlenberg :—

Akkadian. —	*s-i-s-i-n-n-a* = 5 + 2.
Finnic. —	*z-ei-tz-e-m—e*
Votiak. —	*zs-e-s-e-m*
Zyrianian. } —	*zs-i-s-i-m*
Mordvin. }	
Tcheremiss. —	*z-ie—m—e-tt*
Samoied. —	*s-iu*
	s-ei (-ba)
Mantchu. —	*sz-y* (-gae)

[1] *Vide* Sayce, *Assyrian Grammar*, 46.
[2] *Vide* Müller and Deecke, *Die Etrusker*, ii, 382.
[3] *Ibid.*, 436.

Some modern forms :—

Finnic. —	*s-ei-c-e-m-a-n*
Esthonian. —	*s-ei-c-e*
Mordvin. —	*s-i-s-e-m*
Zyrianian. —	*s-i-z-i-m*
Vogul. —	*s-iu*
Samoied. —	*s-eo*
	s-ai (-bua)
Lapponic. —	*ć-e-ć*
	tj-e-tj-e
	kj-e-tj-a
Magyar. —	*h-e-t*
Chinese. —	*tsh-ei-h*
Basque. —	*z-a-z-pi*
Etruscan. —	*c-e-z-pa*
Akkadian. —	*s-i-s*-na (abbreviated form)

The Ak. *sisinna* arises out of *va*-s ('5') + *m-inna* ('2') abbreviated as *ias-inna*. It will be observed that the suffixes in the Samoied *sei-ba*, Mantchu *szy-gae*, Basque *zaz-pi*, and Et. *cez-pa* (cf. Et. *sem-φa*, '9') correspond. The Chinese form is derived from the Mantchu.

CIEM. 'Eight'. Regarded as 10 − 2.

"Unklar ist *χiem*",[1] remarks Deecke, and unclear it must remain to those who would interpret Etruscan on Aryanistic principles; but, as we have already seen,[2] it is the abbreviated form of an original *cine-mezza*, which = the Ar. *kina-minschau*. "The Egyptians", says Mr. Renouf,[3] "as is generally well known, were in the habit of omitting vowels in writing, which were absolutely necessary for the pronunciation of a word and were supplied by the reader's familiarity with the living language"; and the same principle, and not restricted to vowels only, exactly applies to the Etruscan language and inscriptions. From the instance of *sem*, '9', I infer that *cine-mezza* had ceased to be a spoken form for some centuries B.C. The '10'-forms *mez* and *za* I shall refer to in their proper place.[4]

Amongst other instances of the formation of '8' by subtraction we find :—

[1] In Etruscan *c* often = χ, *e.g.*, in the loan-word *-c*, *-χ*, the Lat. *que*.
[2] *Vide sup.*, p. 386.
[3] *Proceedings* Soc. Bib. Archæol., Nov. 1888, p. 8.
[4] *Vide inf.*, p. 403.

Finnic.— *kahdeksan* = *kaksi* ('2') from *ksan* ('10').
Lapponic.— *kaktse* = *kwekte* ('2') — *tse* ('10').
Esthonian { *kahheksa* / *katesa* } = { *kaks* / *kats* } ('2') from { *ksa* / *sa* } ('10').
Mokscha.— *kafksa* = *kafta* ('2') — *ksa* ('10').
Zyrianian.—*kokjamys* = *kyk* ('2') — *ja-mys* ('10').

SEM, SEM-φA. 'Nine'. Regarded as 10—1.

Pauli considers that the Et. for '9' was *semφ*, but the *φa* (cf. *cez-pa*) is only a suffix, an enclitic conjunction, as in *sem-φa-leχ-a*; and this latter being a decade-form and not a dice-form, *sem*, on internal evidence, must be either '7', '8', or '9'. As we have seen, it is not '7' or '8', therefore it must be '9'. But, further: according to linguistic law, as 8 = 10 − 2, 9 must = 10—1; we have therefore to see whether *sem*, in the light of dialect-comparison, fulfils this combination of requirements, *i.e.*, whether it means '9', and '9' formed by subtraction. If it answers this special and peculiar test, we must, I think, needs conclude that the principle of interpretation here advocated is correct.

We have seen[1] that the Et. '8' is a variant of the Arintzi '8'; hence the Et. '9' is probably a variant of the Ar. '9'. This latter form, as noticed, is *kuisa-minschau*, "1 from 10", *ku-isa* being the Ak. *gu-is*, and the '10'-form *min*[2] is at times abraded to a single letter, "*m-n* (*ma*, *mi*, *m*)",[3] as, indeed, it is in *cie-m*. As the Ar. *kin-a*, '2' = the Et. *cin-e*, so the Ar. *is-a* '1', would = an Et. *is-e*. Again, as the Et. form *e-sal*, '3', becomes *zal* and *zl*, so by analogy would the form *i-se* become abraded as *se*, to which adding the *m*, being the most abraded form of the Et. *mez* (= *min*), we have exactly the Et. '9'-form SE-M, = "1 from 10". An Arintzi form, similarly abraded, would have been SA-M, thus:—(*kui*-) SA-M (*in-schau*).[4] Whether this combination of evidence, converging on different lines to a focus, can be accidental, I leave to the judgment of the reader.

VI.

The '10'-forms. NURθ.—For this special '10'-form, which is merely the name of an Etruscan goddess, we are indebted to the acumen of Pauli. Nails, indicating "the ten months of the old

[1] *Sup.*, p. 386. [2] *Vide inf.*, p. 403. [3] Schott, *Das Zahlwort*, 20.
[4] *Vide* R. B. Jr., "The Etruscan Numerals '*Seven*' and '*Nine*'" (in *The Academy*, Aug. 20, 1887).

Etruscan year", were fixed in her temple,[1] and hence she became "the goddess Ten", Lat. Decuma, Decima; just as, conversely, the Euphratean lunar goddess Istar was called "the goddess Fifteen", because specially connected with the fifteenth day of the month.[2] *Nurθ* as a numeral-form occurs at least twice in the Inscriptions; once[3] in the fragmentary form *-rθz, i.e.*, [*nu*]*rθz* (not *h-uθz*, as Deecke would read), "10 times"; and, again,[4] in the erroneous and almost impossible form *nupφzi*, for which Pauli, no doubt correctly, reads *nurθzi*, "10 times". This is in exact accordance with the peculiar formation in *-z -zi* of Etruscan numeral adverbs, *e.g.*, *ci-zi*, 'twice', *esl-z*, 'thrice', *θun-z*, *θun-e-si*, "5 times", *cezp-z*, "7 times". The same formation reappears in Magyar, where we find the numeral adverb *sz-er* (*e.g.*, *egy-sz-er*, 'once', *ket-sz-er*, 'twice', etc.), an outcome of some ancient Turanian word meaning 'row' or 'order'.[5] Cf. the Turkic *syra*, Mongolic *sira*, 'row'.

Tesan, tezan.—Deecke considers *tesan* to be an Etruscan number-word equivalent to the Lat. *decem;* and Pauli, who appears to think that *nurθ* must be the only '10'-form used in Etruscan, subjects his friend's hypothesis to a most searching criticism, and purports to refute it by producing very strong evidence that *tesan* was used in the sense of 'dedicatio'.[6] I quite agree with him (1) that Etruscan not being an Aryan language, *tesan* is wholly unconnected with *decem;* and (2) that *tesan* is apparently used in several Inscriptions in the sense of 'dedicatio'. But, for all that, it by no means follows that *tesan* is not a '10'-word.

There is a widespread Turanian '10'-form in *t-s* and variants,[7] as follows:—

Finnic. —	*k-s-a-n*[8]	= *tsan*	= *t-a-s-a-n* (Schott)
	k-s-e-n	Etruscan. —	*t-e-s-a-n*
Esthonian. —	*k-s-a*		*t-e-z-a-n*
Mordvin. —	*k-s-o*	Zyrianian. —	*d-a-s*
	k-s-e	Magyar. —	*t-i-z*
Lapponic. —	*t-s-e*	Lithuanian. —	*t-i-s* (a loan-word)

[1] "Vulsiniis clavos indices numeri annorum fixos in templo Nortiae Etruscae deae comparere" (Livy, vii, 3). "Nursia Tusco" (Juvenal, *Sat.*, x, 74). The name Nur-*θ*, Lat. Nur-*s*-ia, affords a good illustration of the *θ-s* change (*vide sup.*, p. 396).

[2] *Vide* R. B. Jr., *The Myth of Kirkê*, 111; Sayce, *Assyrian Grammar*, Syl., No. 394: "*esa, sa*, fifteen, the goddess Istar".

[3] Gamurrini, No. 740.

[4] Fabretti, No. 2339.

[5] *Vide* Schott, *Das Zahlwort*, 26.

[6] *Vide* Pauli, *Die etruskischen Zahlwörter*, 31-6.

[7] *Vide* Schott, *Das Zahlwort*, 16.

[8] *Vide sup.*, p. 399.

Tcheremiss.—	*ch-s-e*	Five non-Aryan dialects of India	*d-a-s*[1]
Basque. —	*t-z-i*	Turkic. —	*o-t-u-z* (3 × 10 = 30)
Circassian. —	*t-z-e-y*	Yakute. —	*o-t-u-s* (3 × 10 = 30)

I have already noticed the Finnic *ksan* and several other immediately allied forms, when illustrating the formation of '8' by subtraction. The Eskuara (Basque) form *tzi* is very interesting, especially since Basque, like Etruscan, has frequently been regarded as *sui generis*. The connection of the Basque '7'-form, *zazpi*, with the Et. *cezpa* has already been illustrated, and the *tzi*-form occurs just where we should expect it, namely, in '8' and '9':—

8. *Zortzi* = *zort* + *tzi*, = "2 from 10", = 8.

9. *Bederatzi* = *bedera* ('1') + *tzi*, = "1 from 10", = 9.

The Arintzi *schau* has already been fully noticed.[2] Some have supposed the Zyrianian *das* to be an Aryan loan-word, borrowed from the Russian, and hence have been naturally compelled to suggest that the Magyar *tiz* was also a loan-word. There is no reason to suppose anything of the kind; the Turanians were quite able to provide themselves with '10'-words without applying to their neighbours, and I think the above list shows conclusively enough that they did so. On the other hand, in Lithuanian, the "language spoken by the least progressive member of European Aryans", and exposed to contact with non-Aryan races, we find, indeed, a true Aryan '10'-form—*deszim-t* with a final *t* (= Sanskrit *dasan*, Gk. δέκα, Lat. *decem*, etc.), and a singular second form *deszim-tis* (a combination of 'tens'?) recalling the Magyar *tiz*. Prof. Skeat remarks that the Lithuanian form for a 'thousand', *tukstan-tis* (100 × 10?), is not "at all easy to account for"; and, hence, it is far more reasonable to conclude that any borrowing has been on the Aryan side. And this view is further much strengthened by a consideration of the '11'-form in Lithuanian. The usual Aryan 'elevens' are perfectly regular and simple. *e.g.*, Sk. *ekadasan* (1 + 10), Gr. ἕνδεκα, Lat. *undecim*, Lettic *ween-pa-zmit* (= *weens*, '1', + *deszmit*, '10'); but the Lith. 'eleven' is *wiens-lika*, where we are surprised to meet the Etruscan and Turanian '10'-form *lχ*, next to be considered.

Lastly, I have to deal with Pauli's view that the Et. *tesan* = 'dedicatio', and the deductions to be drawn from this circumstance. That *tesan* at times = 'dedicatio' I quite agree. Special circum-

[1] *Vide* Hunter, *The Non-Aryan Languages of India and High Asia*, 42.

[2] *Vide sup.*, p. 385.

stances having evolved a special '10'-word, *nurθ*, the ordinary '10'-word receives in time another and a secondary sense, but one which makes its primary meaning remarkably clear. That which is dedicated is primarily the tenth, the tithe. So, after the defeat of Xerxes, the Greeks dedicated a tenth of the spoil, and with it was made the golden tripod at Delphoi.[1] So, the Athenians dedicated the tenth part of the ransom-money obtained from Boiôtians and others to Athena, and made with it a brazen chariot drawn by four steeds.[2] In like manner the Siphnians sent the Delphic Apollo the tithe of their gold mines.[3] The tithe of Arês with respect to war-spoils is referred to by Lucian[4]; and, lastly, to take an Italian instance, we read in Livy, "Tibi [sc. Pythico Apollini] hinc decumam partem praedae voveo." Hence, there is no difficulty in understanding, with Pauli, such an Inscription as *Tezan te ta tular*[5] to mean "eine dedicatio statuta (sc. est) hic cippus", *tezan* being a pious offering, literally a 'tithe'.

Lχ. *Leχa, liχa.*—We now come to the most prominent of Etruscan '10'-forms, the one which appears in five of the decades. Allied forms are:—

Etruscan. —	*l-e-χ-a*	
Lithuanian. —	*l-i-k-a* (*vide sup.*)	
Lapponic. —	*l-o-kk-e*	
	l-o-g-e	
Vogul. —	*l-a-g-a*	
	l-a-v-a	
	l-o-u	
	l-a-u	(*e.g.*, *sat-lau*, '70').
Tcheremiss. —	(kok-)*l-a*	= 2 × 10 = 20.
	(kum-)*l-u*	= 3 × 10 = 30.
	(vif-)*l-e*	= 5 × 10 = 50.
Turkic. —	(el-)*l-i*	= *al-lig*, = 5 × 10 = 50.
Tshuwash. —	(al-)*l-a*	= 5 × 10 = 50.

The abraded forms are identical in Tcheremiss and Tshuwash. So, in Kamacintzi the '10'-form *tung*, changed to *tugu*, is abraded to *tu*.[6] The Eastern forms in this list prove that the Lapponic word is not borrowed from the Lithuanian.

[1] Diodoros, xi, 33.
[2] Hêrodotos, v, 77; cf. Pausanias, I, xxviii, 2.
[3] Ibid., X, xi, 1.
[4] *Peri Orchêseôs*, 21.
[5] Fabretti, No. 1910.
[6] *Vide sup.*, p. 385.

θRUM.—This is the second of the two principal Etruscan '10'-forms, and appears in three of the decades. Allied forms are:—

Etruscan. —	*-θ-r-u-m*	
Yenissei. —	(sai)-*θ-j-u-n*[1]	= 4 × 10 = 40, Et. ZAθRUM.
Ariner (A.D. 1735). —	*-θ-j-u-ng*	
Mantchu. —	*d-ch-ou-an*	
Yakute. —	*d-j-ea-n*	
	uo-n	
Japanese. —	*d-j-iu*	
Kamacintzi. } Arintzi. } —	*t—u-ng*	
Kamacintzi. —	*t—u*	
Ostiak.—	*j-eu-ng*	
	j-a-ng	
	j-o-ng	
Jurak-Samoied. —	*i-u*	
Mongol. —	*y-a-ng*	
	z-iu-n	
Tunguse. —	*z-a-n*	
Turkic. Koibal. Karagass. } —	*o-n*	

Mezza. The remaining Etruscan '10'-form, found in the compound *cine-mezza-θrum*, '80', as already noticed,[2] originally represented two distinct '10'-words, the sense of which passed over to the combination. I further remarked that they might be, and have been transposed without affecting the meaning: *za-mez*, as well as *mez-za*, = 10 + 10. Though when *mezza* became one word, the two tens were also fused into one, yet various traces of the original signification, *i.e.*, 10 + 10, = 20, remain. Thus the Yakute '20' is *syr-bae*, = *sur-ma* (= Ar. *schau-min*); the Turkic '20' is *yigirmi*, = *yir-mi*; the Lamuti '20' is *gur-mer*, "mit *r* statt *n*".[3] Another variant of *mezza* is the Ariner *man-tschau* (cf. the Mantchu *schy* Chinese *shih*, '10'), but examples of the reversed form (*za-mez*, *schau-min*) are more common. Such are the

Finnic. —	*ky-m-men-en*
	kje—men
Esthonian. —	*ku-m-me*

[1] This comparison was first made by Canon Taylor (*On the Etruscan Language*, 13).

[2] *Vide sup.*, p. 385.

[3] Schott, *Das Zahlwort*, 20.

Mokscha. —	*ke—men*	
Ersa. —	*ka—men*	
	ga—men	
	ka-m	(*kam-väike*, 10 + 1)
	ka	(*ka-vate*, 10 + 5)
Zyrianian. —	*ja—mys*	
Basque. —	*ha—mar*	(Cf. the Lamuti *mer*)

Such, then, are the '10'-forms, and I need not further remark on the extraordinary way in which the Etruscan forms, except the speciality *nurθ*, harmonise with, illustrate, and are, in turn, illustrated by the forms in the various other dialects. Languages are often capricious in their use of '10'-forms; a dialect will employ several, and frequently not in regular order; one word may be used for '10' itself, and another or others for '10' in compounds.

The numerals 11-19.—As it is not my intention in this paper to advance beyond the region of what I may call comparative certitude, I shall not offer detailed remarks upon the proposed forms 11-14, 16-18; they are suggested by analogy, but we can never be wiser than our facts. Such an Etruscan form as **tesmaχ* or **tesan-maχ*, "10 + 1", might easily pass into **tez-an-aχ*, and so would exactly correspond with the Magyar *tiz-ën-egy*, "10 + 1", = 11. But further considerations on these particular numerals I leave for the present, as also reference to two other Etruscan words which appear to me to be numerals, and to mean '10' and '11' respectively.

Teθu. 'Fifteen'? By analogy *tesan-θun*, *tes-θu*, *teθu*, might well be the Etruscan for '15'. We find an Etruscan oracle-goddess, whom Plutarch[1] calls Τηθύς, and whose name appears on the *Templum*[2] of Piacenza in the form Teθvm. As Deecke observes,[3] she is unconnected with the Greek sea-goddess; and may, like Istar, be a "goddess Fifteen",[4] of a lunar and prophetic nature, like Kirkê, Inô, and other moon-goddesses.

Tesamsa. 'Nineteen'? The meaning of this Etruscan word is uncertain, but its form most curiously agrees with what would be a very probable Etruscan '19', TE(*san*)-SAM(*ez*)ZA,[5] = 10 + (1 from 10) = 19. It occurs[6] in an untranslated inscription on the lid of a sarcophagus, and there is no reason why it should not be a numeral. Deecke sees in it a '10'-word.

[1] *Romulus*, ii.
[2] "That curious instrument of ancient Etruscan augury" (Sayce).
[3] *Etruskische Forschungen*, iv, 42.
[4] *Vide sup.*, p. 400.
[5] *Vide sup.*, p. 399.
[6] Fabretti, No. 2335.

VII.

The Decades.—Two '10'-forms Lχ (*leχa*) and θRUM are found as the usual terminations of the decades, just as in the Zyrianian decades we meet with two distinct '10'-forms *jamys* and *das*. There were, as of course, various dialects in Etruscan, although at present we are not in a position to say much about them.

**χimθrum.* = 2 × 10 = 20.[1]

CEALχ, CELχ. = CI + Lχ, = 2 × 10 = 20. Unabbreviated form *cealeχa*, = *ce-a-leχa*. *Ce* = *ci*, '2'; *a* is the "binding vowel", and is omitted in CELχ, = CEALEχA. The Inscription-forms in *-l*, quoted opposite the various numbers, *e.g.*, *cealχl-s* (= *cealeχal-s*), are Genitives, *-l* being a Genitive ending with the Genitival-Possessive signification 'of', "belonging to",[2] *e.g.*, *lupu avils esals cezpalχals*, "died of year third seventieth", *i.e.*, "aged 73".

MUVALχ, MEALχ. = $\left\{\begin{matrix} mu \\ me \end{matrix}\right\}$-$\left\{\begin{matrix} va \\ a \end{matrix}\right\}$-*le$\chi$a*, = 3 × 10, = 30.—This is quite the most difficult of the decade-forms, and if I refer to the opinions, and, as I regard them, the mistakes, of my predecessors in the investigation, it is not with any feeling of triumph over them, for I am deeply indebted to them all; but because, in this instance particularly, these mistakes were unavoidable from the standpoints of the several writers, and are in themselves very instructive, inasmuch as they show how on such lines it was absolutely impossible to arrive at a correct solution of the problem.

Canon Taylor explained *me-alχl* as *maχ-alχl*, and *-alχl* as '20', *mealχl* being thus "one score". But the Etruscan '20' is not so regarded, being 2 × 10; there is no reason to suppose that *me* is an abraded form of *maχ*; and *-alχl* is not '20', but is composed of *a*, the binding vowel, *lχ* (*leχa*), '10', and *l*, a Genitive termination. *Mu-v-alχl* he explained as "one score and ten" or '30', but he arrived at this correct conclusion by taking *v* for '10' and *-alχl* for '20', as before. He apparently regarded *mu* as a variant of *me*.

Both Deecke and Pauli clearly see that *muva* and *mea* are variants and mean the same number.[3] Deecke formerly thought

[1] *Vide sup.*, p. 384.

[2] *Vide* Sayce, in Pauli's *Altitalische Studien*, ii, 127-8. I have treated of the Genitive-ending in *-al* at length in *The Etruscan Inscriptions of Lemnos*, Part ii.

[3] "*Muv-* (*mev-*)" (Deecke, *Etruskische Forschungen und Studien*, ii, 36, note 128); "*Muv-* oder *mev-* (Pauli, *Die et. Zahlwörter*, 35).

that *muvalχls* and *mealχls* were Genitive forms, meaning '30', which is the fact; but he arrived at this conclusion by supposing *maχ* to mean '3', and connecting it with *mea-*,[1] as Canon Taylor did. He has now altered his opinion, and whilst rightly holding *maχ* to mean '1', supposes that *muv-* and *mev-* mean '9', and would fain connect them with the Lat. *novem*, an attempt which Pauli refutes.

Pauli saw clearly that the word is not one of the dice-numerals, and incorrectly assuming that the decades up to 60 *must* be formed from the dice-numerals, has combined the two forms *me* and *mu* in the imaginary word *meu*, to which he assigns the meaning '7'.

Ellis, wrong throughout, and for reasons which it is unnecessary to consider, makes *me-alχl* to mean '20', and *muv-alχl*, '40'.[2]

In deciding the question the following points should be borne in mind:—(1). In numerals the forms 2-9 by no means universally reappear in the decades 20-90. (2). The dice-forms clearly supply the decade-forms 20, 40, and 50; the forms 70, 80, and 90 are, as we have seen, clearly from other sources. The form for 60 is unknown, but it would probably be formed from the dice-numeral *huθ*, '6', as 40 and 50 are formed from the dice-numerals *sa* and *θu*; whilst the Arintzi form *ui-tung* (6 × 10 = 60) makes it all but certain that the Et. 60 must have been *huθrum*. There is no reason whatever to suppose that *muvalχ* and *mealχ* mean '60'. (3). The Arintzi, Kottic, and Yenissei forms of '40' make it absolutely clear that the Et. *za-θrum* (4 × 10) = 40, and is not, as some have supposed, an abbreviation of *zal-θrum*, and thus derived from *zal*, '3'. Hence, as in Etruscan *l* is at times elided, *e.g.*, *vesu* = *ve-l-su*, there was a positive reason for not employing the form *zal* in the decades, *i.e.*, in order to avoid confusion between *za-l* and *sa*, *za*. All these considerations point most strongly to '30' as the meaning of *muvalχ*.

At this stage in the investigation let us turn to linguistic comparison. As noticed[3] there are two distinct '3'-forms in Akkadian, one of which is connected with the Et. *zal*.[4] The other, *u-mu-s* and variants, is based on the idea of plurality, and connected with the Ak. plural-sign *mes*, *mis*, 'many'; for as 'two' gives the gram-

[1] Deecke, *Die Etruskischen Zahlwörter*, 272-3.

[2] *Sources of the Etruscan and Basque Languages*, 18. In a previous work (*Peruvia Scythica*, 179), he explained '*me-a-lchls*' and '*muv-alchls*' as" 'tenth's', or 1 × 10."

[3] *Vide sup.*, p. 381.

[4] *Vide sup.*, p. 394.

matical idea of the dual, which is probably older than the plural, just as 'two' comes before 'three', so 'three' supplies a ready and easy idea of the plural, *i.e.*, that which is more than 'two'. Thus, as noticed, "the Puris of South America call 'three' *prica* or 'many'".[1] Some of these '3'-forms are as follows:—

Akkadian. —	*-uv-u-s*	(*V*, *m*, and *b* are thus interchangeable)
	u-m-u-s	
	v-i-s	
	b-i-s	
	i-s	
Karagass. —	*u—i-s*	
Koibal. —	*u-s*	
Yakute. —	*y-s*	
Turkic. —	*ü-c̃*	
	u-tch	

Besides these direct numeral-words there are, scattered through the Turanian languages, a number of allied forms meaning 'heap', 'multitude', 'people', 'all', 'handful', 'copious', and similar significations, all connected with the idea of plurality and numbers. Such is the Turko-Tatar form *bu-t*, 'heap', 'multitude', etc., whence the Tunguse *bu-tu*, 'handful', the Karagass *bu-tura*, and Buriat *bu-teng*, 'all', the Uigur *bu-tun*, 'people', the Altaic *pu-dun*, 'all'. Such also is the Magyar *bo*, *bov*, *bev*, 'copious', *bov-en*, 'abundantly', which reappears in the Lapponic *ma-l-ked*, 'satis multum', the Finnic *pyy-lea*, and other allied forms. This same widely-spread form makes yet another and a very remarkable appearance, namely, in certain high number-words, *e.g.*,—

Buriat. —	*m-e-a-ngan*	='1,000.' Cf. the Tibetan *mang*, 'much'.
Koibal. —	*m-u—ng*	
Tungusic. —	*m-i—ngan*	
Kamassin. —	*m-i—ng*	
Turkic. —	*b-i—m*	
	b-i—n	

In the light of these forms we have, therefore, no difficulty in restoring a second Etruscan '3'-form, preserved in this decade, *i.e.*, *u-*{*mus*, *mes*}, the *u* of which has disappeared, as in most of the other

[1] Sayce, *Principles of Comparative Philology*, 274. Tylor quotes the nursery rhyme, "Three's a many" (*Primitive Culture*, i, 240).

dialects.[1] Thus, *muval*χ = *muvale*χa, = an original *u-mu-s-va le*χa; *meal*χ = *meale*χa, = an original *u-mes-a-le*χa. The Buriat and Koibal forms for '1000' have preserved exactly the variants *me-a* and *mu*. We therefore, from every point of view, arrive at the conclusion that *muval*χ and *meal*χ = 30.

With the Etruscan enclitic conjunction *va*, *ua*, *a*, compare the Akkadian *va*, *ua*, 'and', the Kamassin *wa*, the Tungusic *wa-l*, *ma-l*, the Ostiak *me-t*, "with it", the Magyar *me-g*, 'and'. Example:—*zilc-marunu*χ*-va*,[2] "magistrate procurator-and", *i.e.*, "(was) magistrate and procurator".

ZAθRUM. = SA + θRUM, = 4 × 10 = 40.[3]

**θunχulθ*. = *θun* + *χu* + *le*χa, = 5 × 10, = 50. Pauli[4] conjectures that the Et. *θunχulθl* is a numeral, and has much to say about it, but does not explain it. In Etruscan χ at times = θ, *e.g.*, *me-*χ*-l* = *me-θ-l*, and this apparently uncouth form is simply *θun-χu-lχ-l*, a Genitive.

The copulative particle *χu* (*cu*) in *θun-χu-lθ* is not the Latin loan-word *qu-e*, Et. χ, *c*, which in Etruscan as in Latin is appended to a word; but originates from the Et. *ci*, '2', meaning primarily "the other (second) hand", then, generally, 'another', and lastly, '+' or '×', as the case may be. It is exactly illustrated by the Ostiak *ja-xat-jong*, "1 + 10", = 11. Here *xa-t* originates from the Ostiak *ka-t*, Ak. *ka-s*, Et. *ci*, *ci-n*, '2'; and, as Castrén suggests, *ja-xat-jong* might mean, in the original notation-scheme, "1 of the 2nd 10", = 11, but for many centuries *xat* has simply meant '+'.

**huθrum*. = HUθ + θRUM, = 6 × 10, = 60.—The Arintzi form *ui-tung* makes it almost certain that this must have been the Etruscan '60'.[5]

ESLEMZAθRUM. = *esal-e-mezza-θrum*, = (10 − 3) × 10, = 70.[6] In this decade we possess both *θrum-* and *le*χa-forms, showing that probably there was a complete series of each. Cf. *Eslemza**θ**rumis* [*ce*] = '70th'.

CEZPALχ. = *cezpa-le*χa, = 7 × 10 = 70. *Vide* 'Seven'.

CIEMZAθRM. = *cine-mezza-θrum* = (10 − 2) × 10 = 80.[7]—The word *ciemza**θ**rms* occurs in an Inscription on a sarcophagus which

[1] Cf. the Et. *e-sal*, *zal*; *e-cn*, *cen*.
[2] Fabretti, No. 2056.
[3] *Vide sup.*, pp. 385, 403.
[4] *Die et. Zahlwörter*, 129.
[5] *Vide sup.*, pp. 385, 403.
[6] *Vide sup.*, p. 389; R. B. Jr., in *The Academy*, Dec. 1, 1888, p. 358.
[7] *Vide sup.*, pp. 386, 398.

bears "la figura di un uomo vecchio". The Inscription is as follows:—

larθ: χurχles: arnθal χurχles: θanχvilusc cracial
Lars Churchle, of-Aruns Churchle and-of-Tanaquil Craci

clan: avils: CIEMZAθRMS: *lupu*
son, of-year eightieth died.

The *c* in *θanχvilus-c* = Lat. *que*. The Genitive ending in *-al*[1] (*arnθ-al, craci-al*) will be noticed. *Clan*, the Osmanli *ogul, oglan, oghlan*, 'boy' (literally 'sprout'), is rendered in a bilingual Inscription[2] by the Latin *filius*. "Of year eightieth" = "aged 80".

SEMϕALχ. = *semϕa-leχa*, = 9 × 10, = 90. *Vide* 'Nine' and 'Nineteen'.—The numbers 21-9, 31-9, 41-9, 51-9, 61-9, 71-9, 81-9, and 91-9 require no special remark. It will be observed that, in accordance with the Inscriptions, the decade is placed last, on the principle 1 + 20, etc.

**Vurθ*. "A hundred". = 10 × 10 = 100.—We meet with a word *versus* or *vorsus*, meaning "one hundred feet square", of which it is said, "Primum agri modulum fecerunt quatuor limitibus clausum figurae, quadratae similem, plerumque centum pedum in utraque parte, quod Graci πλέθρον appellant, Tusci et Umbri *vorsum*."[3] The form *vor-s-us* suggests an Etruscan original *vur-θ*; *vurθs* would = '100th', and *vurθzi*,[4] "100 times", hence *vorsus* (= *vorθsus*) = 100 times (a foot), and also, like πλέθρον, 100 × 100 = 10,000 (square feet). It may be tempting, at first sight, to connect such a form as *vur*, '100', with the Jurak-Samoied *jur*, etc.[5] But an Etruscan *v* does not, I think, represent *j*; and we should rather look for the origin of *vurθ* in the '10'-word *mezza*, as *vezza—vurs—vurθ* (= 10 × 10). In Etruscan *s* at times = *r*, *e.g.*, *E-s-us, E-r-us*, and *zz* becomes *rz*.[6]

The Ordinals.—As *-s, -si, -sa, -ssa* are Etruscan Genitive-endings, it has often been assumed that the final *s* which appears in the numeral-forms in the Inscriptions (*e.g.*, *esal-s cezpalχal-s, maχ-s, semϕalχl-s*, etc.) is merely a sign of the Genitive case. But this is not so. As before stated,[7] it is the *l* which marks the Genitive here; and to Canon Taylor belongs the merit of first perceiving that the *s* represents the ordinal termination.[8] Two examples show another letter; in Fabretti, No. 2340, we read, *avils*

[1] *Vide sup.*, p. 405. [2] Fabretti, No. 460.
[3] Fragm. *De Limitibus*, p. 216, ed. Gæs.; *vide* Fabretti, *Glossarium Italicum*, 2004.
[4] Cf. *cizi, θunz, cezpz, nurθz, nurθzi*. [5] *Vide sup.*, p. 386.
[6] *Vide* R. B. Jr., *The Etruscan Inscriptions of Lemnos*, 353.
[7] *Sup.*, p. 386. [8] *Etruscan Researches*, 179.

[*m*]*aχs mealχl-sc.* Deecke, contrary to the evident sense of the Inscription, and unsupported by a single similar numerical example, has suggested that the *c* here = *que,* which, as noticed, is at times the meaning of *c* final. Canon Taylor well observes, "This is a valuable instance, as it doubtless presents a more archaic form of the suffix [than the single letter *-s*]. The final *k* [*c*] might easily be extruded, but it could not have been intruded. Now in Karagass Tatar we find this precise form, the ordinal suffix being either *-ske* or *-eske.*"[1] We also meet with such Turanian ordinal-forms as the Tungusic *-ki, -tku,* the Buriat *-d-eki,* the Votiac *-eti,* the Magyar *-edi-k, -odi-k,* the Kottic *-s,* the Mordvin *-tse,* the Mantchu *-tsi, -ci,* the Akkadian *-ka-m,* etc. But none of these forms, all or nearly all of which are almost certainly connected in origin, better illustrate the process by which an *s* may be left alone at the end of an ordinal, than the Finnic.

The Turkic ordinal termination *-ndi* (cf. Turkic *iki-ndi,* 'second') reappears in Suomi (Finnic) as *-nt, e.g., nelja-nte,* '4th', and before *i* the *t* becomes *s,* so that we have the forms[2]:—

nelja — *n-t-e*
nelja — *n-s-i*
nelja —— *s-i*
nelja —— *s*
} = '4th'.

So, we have *kaksi,* '2', *kahde-nsi, kahde-s,* '2nd', *kolme,* '3', *kolma-nsi, kolma-s,* '3rd'. We can, therefore, easily restore the apparently perplexing Etruscan form as :—

ME-A-LEχA-L-ISCE
(3 × 10) + Genitive-sign + ordinal-ending } = "of-30th".

The other Etruscan example is *zaθrmisc* (= *zaθrumisce*), = '40th', from which we see that the unabbreviated Etruscan ordinal was *-isce.*

There are many other points and questions connected alike with the study of Etruscan generally and with the numerals in particular, upon which I do not enter here. I make no pretensions to exclaim, like one of the workers in the field of Etruscology,— "Etruria Capta!" These remarks are merely preliminary and undogmatic, and are submitted to the judgment of experts and students. The Etruscan riddle, that most perplexing problem in linguistics, will be solved in time, and I trust that the evidence which I have collected will not be without its value, but the end is not yet.

[1] Or *-iske.* It is rather singular that in Koibal, the immediately connected dialect, *eske, iske,* means a 'rudder', or that which enables us to keep our proper course, line, or row (*ordo*). [2] *Vide* Schott, *Das Zahlwort,* 24.

ROBT. BROWN, JUN.

NOTES FROM PARLIAMENTARY PAPERS.

No. 8.

Report of the Special Commission for 1887 on British New Guinea.

(Continued from p. 283.)

"THE Motu people were disgusted when they saw it, and said, 'Is this what we have been paying our best arm shells and tomahawks for, for so many years?' It produced rain and abundant crops, and had had very many presents made it for many generations. In the morning of the next day the old sorcerer came to Chalmers, the spirit had appeared to him while he slept, and was very angry, and put two more stones on his chest, and told him to bury them again. Mr. Chalmers upon this took those two stones, too, and told him if the spirit appeared again that he was to say that he wished to have nothing more to do with him. The old man said that some great piece of bad luck was sure to happen to his tribe, and was not at all pleased. He then tried to get some pity, but they were all glad to see so great a tax as this had been to them removed. Mr. Chalmers had not expected to find anything at all there in the ground."

It was probably the case in this instance that the sorcerer himself did not know what was buried in the ground, and as this was a very old spirit, and had become a sort of heirloom in his family, he probably believed in it as much as any of his dupes.

The tribes whose head-quarters are at Port Moresby have come so much under the influence of the London Missionary Society that they are discarding to a great extent their superstition. In any other tribe so great a sacrilege as digging up a spirit all powerful for producing rain and crops would not have been permitted. But even these people, the most civilised in New Guinea, and most of them professed Christians, in times of great excitement revert to their old habits. This was shown during the autumn of 1886. At that time a severe epidemic raged along the south coast. The people were dying in hundreds of pneumonia, and were beside themselves with fear. The usual remedies for driving away spirits at night were tried, remedies which had

been in disuse for years—torches were burnt, horns were blown, and the hereditary sorcerers sat up all night cursing, but still the people died. Then it was decided that the land spirits were working this harm, and the whole population moved their canoes out in the bay and slept in them at night, but still the people died. Then they returned to their village and fired arrows at any moving object they saw, so that many native dogs came to an untimely end.

Mr. Lawes, junior, who had to pass through the village every night at about 10 p.m., was begged by the natives always to wear white clothes so that they might know it was not a spirit.

If he had failed to do this he might possibly have been shot by mistake. It will be observed by this that the native ghost is black.

In course of time the epidemic wore itself out, but while it lasted the civilised Motuans were as superstitious as any of their neighbours could have been. It sometimes happens that a sorcerer makes use of his power for his own evil ends, and then the sacred character of his office proves to be insufficient to protect him. This is not often the case, as he is usually a rich man and can afford any extravagance in moderation. A case, however, came under my notice at a place called Keite on the south coast.

The extract from my journal is as follows:—"Last night a child in the village died, and a horrid howling and drumming was kept up in consequence for the benefit of her departed spirit. I heard yesterday that a sorcerer was killed for committing adultery. It seems that he used his power for this purpose. He said he could make all the women barren, and kill them too, if he chose; and so the outraged husbands saw if they could kill him, and succeeded." As I have said before, these cases are uncommon, as the sorcerer with all his imposture generally recognises in his own mind the fact that he is an imposition, and in his prophecies he takes very good care that there should be a loophole for escape in the not improbable event of his predictions not being fulfilled. One curious feature in connection with them is the sale and issue of charms. These charms are not modelled on any fixed principle, but depend entirely on the fancy of their designer. They are considered sufficiently valuable to be a source of great profit to the maker, but I have never found any difficulty in buying them from natives. I suppose they are easily renewed. The natives do not of their own accord show them to you or offer them for sale, but nearly every man carries a netted bag on his shoulder, and if you

take the trouble to examine this, after extracting a heterogeneous mixture of old match-boxes, clay pipes, odds and ends of all sorts, you will find the charms at the bottom. Sometimes there will be a dozen of them, from the bit of bark with a few threads of sinnet round it—a cheap charm, I should think—to the beautifully worked little crab-claws arranged in every fantastic design, no two are found precisely similar. Some are intended to ensure safety against shipwreck; others against spear wounds; others, again, provide a complete immunity against accidents of all sorts; in fact, there is no end to them. The sorcerer might almost occupy the position held by the more civilised insurance company, with even greater profits, for while he issues policies of insurance in the form of crabs' claws and pieces of bark, he incurs no responsibility except in possible loss of credit and the chance of some angry creditor taking the law into his own hands. One attribute he possesses must not be lost sight of, he is doctor and surgeon as well as sorcerer. His surgery is of an elementary character. It is always supposed that if a man is suffering pain from any cause whatever that it can be let out by making a long incision over the abdomen. It is obvious that this cannot be a very safe remedy, as the incision is not infrequently sufficiently deep to cause death in itself. Some time ago I saw a woman, the wife of a native teacher, who had been badly speared during an attack on the teacher's boat. She was the only survivor of the party. Although her wounds were severe, by far the worst one she had had been inflicted by the hand of a native doctor in the form of a long and much too deep cut over the abdomen. The superstitions of the Papuans can hardly be said to resemble any form of religion. As far as I know, all their spirits are malignant ones, which have to be overcome either by hand, cursing, or propitiatory offerings.

It seems entirely foreign to the native mind ever to have conceived an idea of a beneficent spirit. In the characters they ascribe to their spirits they unconsciously reproduce their own natures: he employs the same treacherous artifices, and has to be overcome by the same cunning which they would employ with their earthly neighbours: in fact, they are illogical to a degree in speaking of them. They believe them to be intangible and supernatural, and yet assert that they can kill them with arrows or spears. They are intensely frightened of them, and yet do not hesitate to employ language to them which no spirit with any self-respect could tolerate for a moment.

Fire is the great purifier and the terror of spirits, but while they

admit that they can drive them away with bonfires and torches, they do not seem to have any spirit of the fire, possibly because he would almost assume a beneficent appearance in ridding them of the others. Hereditary spirits which afflict whole tribes from generation to generation seem to be not uncommon, but as a general rule each man creates his own for himself, and there is no law restricting the number an individual is allowed to have.

Conscience, I think, troubles them but little, and a man is seldom haunted by the recollection of former misdeeds.

The fact of a man having some near relation's skull exposed in a conspicuous position opposite his front door would cause him no pangs of regret, nor is it likely that his defunct relative's shade would ever reproach him with having annexed his head in a somewhat arbitrary manner.

Conscience with them implies no loss of self-respect, but merely the fear of retaliation and personal danger to themselves. One way in which sorcerers occasionally come to grief is not very uncommon. This is when a tribe possesses two rival sorcerers.

They will try every artifice to secure each to himself the greatest custom, and will undersell each other to attain this object. At length one of them oversteps the limits of prudence and prepares some extra potent charm—a love-charm, probably, which recoils upon his own head, as he probably, at some not very remote period has to deal in an unpleasant manner with injured husbands or fathers. There must be some form of understanding, however, between rival sorcerers or they could never preserve the secrets of their trade, and those once gone, so would their occupation be likewise.

They have their familiars or spirits, who belong to themselves alone. On more than one occasion I have heard the sorcerer speaking to his familiar in a little squeaky voice. The familiar, and indeed all spirits, when they speak, appear to imitate the squeaky voice of some small animal and are answered in the same manner. During voyages the canoes will stop at certain localities, and a great drumming, burning of torches, and cursing will go on, to either frighten or drive away the local spirit. As a general rule, before the canoe resumes its journey some member of the crew will assert that he saw the hostile spirit fly away in the form of a flying fox, or some other nightly animal.

Even amongst members of the same tribe a man may compass the death of another by paying the sorcerer to slowly kill him The methods employed are much the same, I fancy, in every

savage community in the world. If the cuttings of the victim's hair can be obtained and are buried, he will surely die; but every man takes care to destroy for himself such dangerous things as these.

In default of this, the refuse of his meals buried in the ground will have a most unwholesome effect; some kind friends will be sure to tell him of the secret influence at work against him, and unless he buys off the sorcerer, or takes the law into his own hands, a thing he hardly dare do in his own tribe, he will in course of time be so worked on by his feelings that he will undoubtedly die.

The sorcerer seems to be quite impartial as to who it is upon whom he brings his power to bear. He requires payment, but having received this, he goes to work quite as cheerfully on one of his own tribe as upon a stranger. With him it is purely a matter of business. When the rest of his tribe are fighting, he is very often excused from taking part in the fray, as it is considered he is of more use at home than he would be in the field. Besides, by the time his reputation is secure he is usually a very old man, and would not be of much use in active warfare. They combine a certain amount of astronomy with their other pursuits, but they are not nearly such keen observers of the stars as the Fijians or Solomon Islanders. Of course, as they have to produce fine weather or rain at will, it is not unnatural that they should study the signs of the weather closely. The great difficulty in the way of writing accurately about native superstitions is the disinclination on the men's part to talk of them. They have a scared look on their faces, and the information has to be dragged out of them bit by bit. If they should fancy they are ill after a conversation of this sort, which they very probably will, they are sure to lay the blame at the door of the inquisitive white man. It has been a common enough plan for white traders to gain their ends by working on native superstition and frightening them into doing work they would have preferred not to do. Occasionally, no doubt, it might be useful, but as a rule I should say it was an unsafe proceeding.

When I was in New Ireland, in 1883, I might quite easily have performed the miracle of foretelling an eclipse of the sun. I had with me a nautical almanack with a map of the eclipse, and by this I saw that the northern end of New Ireland was on the line of partial contact. It would have been a dangerous experiment to try, and, besides, I could not have produced a total eclipse.

The native mind is very susceptible to ridicule, and if I once laughed at a man whom I had persuaded to confide in me, farewell to any chance of getting any more information out of him. The best plan is to listen to the men talking to themselves round a camp fire, under which circumstances they speak quite openly upon all sorts of sacred subjects. I heard not long ago that the people of a village in Milne Bay, who had been doing a good deal of work for a certain white man, had sworn, in consequence of several cases of illness in the village, to smoke no more white man's tobacco till they had procured a white man's head. They thought that a white man's devil was responsible for it, and that nothing but a head could frighten it away. I have never made up my mind whether anything of the nature of transmigration of souls is believed in. There was certainly a very large alligator at South Cape, which was known to the natives and called by the name of a defunct chief, but this in itself would be hardly sufficient to prove it. They seem to believe in something like the soul; but if the native soul is in the habit of entering into the lower animals, they must, as a rule, be small animals they patronise, as whenever they hold conversations with the living they speak in a small, whistling voice.

The habit, too, of drumming and burning torches on the death of a relative seems to imply that they are sending the departed soul safely off on its journey. In some of the Louisiade Group there are certain very large well-known trees under which they have their feasts. These trees appear to be credited with possessing souls, as a portion of the feast is set aside for them, and bones, both pigs' and human, are everywhere deeply embedded in their branches. It is certain that the souls of murdered men are constantly haunting their skulls. I had, a short time ago, two skulls, which I had demanded of the natives of Moresby Island, sent me. They had to pass throughout the whole length of two large islands before they reached me, and wherever they went they were supposed to have caused sickness and death. It is true that they had for some four months adorned the houses of the murderers without producing evil results, but when the white man insisted on having them they considered that the white spirits were constantly hovering round them and working destruction wherever they rested.

I have constantly seen a man's widows, for days after his death, lying on the top of his grave and keeping up a rapid conversation with him for hours at a time, till they stopped from exhaustion.

A man's soul after death will haunt the places to which he was most attached on earth. There seems to be one locality in which they all live, but there are certain localities in the bush which, for instance, a widow will know to be frequented by her husband's shade. When a man dies his friends often put food in the grave with him, so that wherever he may be going to he shall suffer no inconvenience from hunger. It is a matter of doubt whether any actual mythology exists.

At all times, in dealing with savage races, it is most difficult to decide where history ends and mythology commences. Native memories, especially Papuan memories, are short, and I should imagine one hundred years to be quite the limit of time from which any events of importance have been handed down as matters of history. I have made repeated inquiries on this subject, and have never been able to learn anything satisfactory. The actual history of some people—the Fijians, Forgans, Maoris, etc.—can be traced back nearly three hundred years; at least the chiefs can tell you who their ancestors were as far back as that. Here it is different. A man can perhaps tell you his great-grandfather's name, but further back than that he cannot go.

As regards their mythology, a man believes in the spirits his father believed in, and invents as many more for himself as he feels inclined. No one objects to his having as many as he pleases; it is only a matter of expense to himself, as he doubtless has to purchase a new charm whenever he invents a new devil.

The uninteresting commonplace stories of yam crops being destroyed by certain devils, and of shipwrecks and disasters of all sorts, are all very much alike, and are hardly worthy of being called a mythology, though, doubtless, the same stories have been told with very little variation from generation to generation.

I think it may be taken for granted, then, that they have no mythology of any interest, certainly none by which their actions of the present day are controlled. And after all it is only with the present day we have to do; no doubt, hundreds of years ago they were in every respect precisely the same as they are now, with the exception of their not having as yet acquired the passion for ornamenting their houses with that ethnological curiosity, a white man's head. In the South-eastern Archipelago dances are very rare, nor have I ever seen one. Such dances as they are, have been described to me as only performed after a feast. No superstitious importance is attached to them, and the details do not bear repetition.

But to the westward, in the Gulf of Papua, symbolical dances are constantly performed, and much superstitious importance surrounds them. Each man is dressed to represent some bird or fish, and the dresses they appear in are marvels of ingenuity and construction. The shark is a favourite symbol, as are also wild ducks and geese. No doubt each man in selecting his dress to dance in, is paying a tribute to the bird or fish in whose image he presents himself. The shark has ferocity and cunning ; the wild duck, swift flight and watchfulness ; the cassowary, strength and speed of foot. One could go on multiplying endless instances.

But the people of the Papuan Gulf are as distinct from the inhabitants of the South-eastern Islands as both races are to the people who dwell on the North-west Coast and in Jeilvink Bay. I will endeavour, from the fear of becoming tedious on the subject of sorcery and superstition, to sum briefly the result of my observations. It is so important a matter in all dealings with natives that it should always be taken into account in the formation of plans in which you are dependent upon them. The best laid schemes may, and often do, entirely collapse through some unforeseen and unreckoned-for piece of superstition. Sometimes, indeed, mere physical fear will be represented as superstitious disinclination to do the white man's bidding. It is impossible for the most experienced white man to follow correctly the native train of thought, but his face is usually a good index to his feelings. They will usually follow a gun or even a revolver anywhere, as they imagine the noise and flash frighten the spirits, while the bullet kills the man. I have often been asked to fire off a gun to frighten away spirits.

Superstition is a constant source of annoyance, for the native spirits are always in the way, and the white man's spirits are of very little practical use to him. It is too deeply planted in their natures to be got rid of even under the teaching and influence of the missionaries. It does occasionally, however, exert itself for good, as in the case already related of the boy who was saved by the petticoats of the women. It is so foreign to the ideas of white men, that it cannot be wondered at that they sometimes unintentionally offend native prejudices, and have to suffer the consequences of their inexperience. There is no doubt, if it could be eradicated from their minds, that all intercourse with them could be carried on in a much safer and more agreeable manner than it is at present.

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